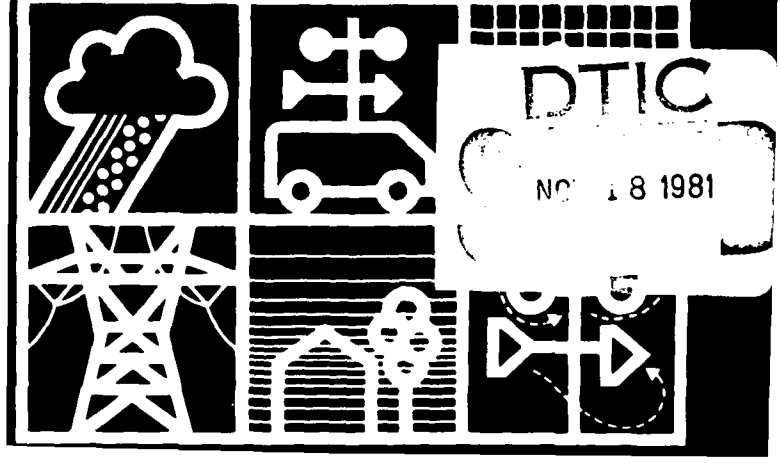
AD-A107 578 METEOROLOGY RESEARCH INC ALTADENA CA F/G 4/2
DROPLET SIZE AND LIQUID WATER CHARACTERISTICS OF THE USAAEFA (C--ETC(U)
AUG 80 M E HUMBERT, L J JAHNSEN, L D DZAMBA DAAK51-80-C-0003
UNCLASSIFIED MRI-80-FR-1748 NL

DROPLET SIZE AND LIQUID WATER CHARACTERISTICS OF THE USAAEFA (CH-47) HELICOPTER SPRAY SYSTEM AND NATURAL CLOUDS AS SAMPLED BY A JUH-1H HELICOPTER

MRI 80 FR-1748



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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO. AD-A107	3. RECIPIENT'S CATALOG NUMBER 578
4. TITLE (and Subtitle) Droplet Size and Liquid Water Characteristics of The USAAEFA (CH-47) Helicopter Spray System and Natural Clouds as Sampled by a JUH-1H Helicopter		5. TYPE OF REPORT & PERIOD COVERED Final Report Jan 80 to Mar 80
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) M. E. Humbert L. J. Jahnsen L. D. Dzamba		8. CONTRACT OR GRANT NUMBER(s) DAAK51-80-C-0003
9. PERFORMING ORGANIZATION NAME AND ADDRESS Meteorology Research Incorporated Box 637, 464 West Woodbury Road Altadena, CA 91001		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS 63209A 1L263209D103 00 034 EK
11. CONTROLLING OFFICE NAME AND ADDRESS Applied Technology Laboratory US Army Research and Technology Laboratories (AVRADCOM) Ft Eustis, VA 23604		12. REPORT DATE Aug 80
		13. NUMBER OF PAGES 61
14. MONITORING AGENCY NAME & ADDRESS(if different from Controlling Office)		15. SECURITY CLASS. (of this report) UNCLASSIFIED
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT (of this Report)

Approved for public release; Distribution unlimited.

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

Ice Detection
Experimental Verification
Adhesion
Ice
Instrumentation Optical Spectrometers
Helicopters
Droplet Sizing
Photodetectors

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

During the months of January, February, and March 1980, the US Army Aviation Engineering Flight Activity (AEFA) conducted natural and artificial icing tests in the vicinity of St Paul, Minnesota. The natural events involved exposure of a fully instrumented JUH-1H "Huey" Helicopter to extended periods of flight in supercooled stratiform clouds. The artificial portion of the testing required the same aircraft to fly in the cloud produced by the helicopter icing spray system (HISS) aboard a CH-47 "Chinook" Helicopter. The tanker cloud was sampled at various water flow rates, ranges, humidities, and temperatures.

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During the test period, the sampling helicopter was equipped with droplet sizing instrumentation provided by Meteorology Research, Inc. (MRI). A similar program was performed during the winter of 1978-1979 (Anderson and Jahnsen, 1979), but nozzle reconfiguration and other modifications to the HISS were necessary to produce an artificial cloud that more closely resembled a natural one. The new nozzles required a new HISS calibration effort.

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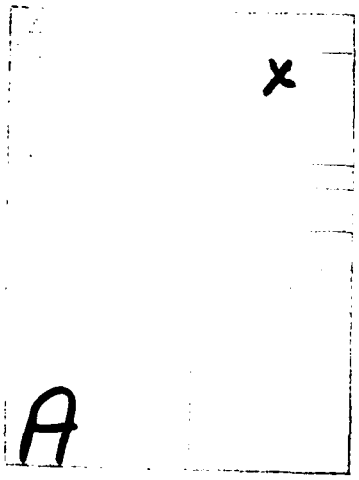

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MRI 80 FR-1748

Submitted to

U. S. Army
Applied Technology Laboratories
(AVARADCOM)
Fort Eustis, VA 23604

Contract No. DAAK51-80-C-0003
CDRL Line Item A004
(DAVDL-ATL-CD)

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Date August 1980

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1. INTRODUCTION

During the months of January, February, and March, 1980, the U. S. Army Aviation Engineering Flight Activity (AEFA) conducted natural and artificial icing tests in the vicinity of St. Paul, Minnesota. The natural events involved exposure of a fully instrumented JUH-1H "Huey" Helicopter to extended periods of flight in supercooled stratiform clouds. The artificial portion of the testing required the same aircraft to fly in the cloud produced by the helicopter icing spray system (HISS) aboard a CH-47 "Chinook" Helicopter. The tanker cloud was sampled at various water flow rates, ranges, humidities, and temperatures. During the test period, the sampling helicopter was equipped with droplet sizing instrumentation provided by Meteorology Research, Inc. (MRI). A similar program was performed during the winter of 1978-1979 (Anderson and Jahnsen, 1979)*, but nozzle reconfiguration and other modifications to the HISS were necessary to produce an artificial cloud that more closely resembled a natural one. The new nozzles required a new HISS calibration effort.

This report describes the MRI instrumentation aboard the sampling aircraft, the data reduction techniques employed, and a discussion of the results.

*Anderson, R. S., and L. J. Jahnsen, 1979: Bell Helicopter UH-1H Natural Icing Test Flights. Data Volume MRI 79 DV-1679/1 prepared for Bell Helicopter, Contract No. F573 5229.

2. INSTRUMENTATION AND CALIBRATION

The MRI instrumentation package was comprised of the following devices:

(1) PMS* axially scattering probe (ASSP-100)
(2) PMS Cloud Particle Spectrometer (OAP-200X)
(3) PMS Precipitation Particle Spectrometer (OAP-200Y)
(4) MRI Buffer Memory System (BMS)
(5) Kennedy Fast Gap 800 bpi Tape Recorder

*Particle Measurement Systems, Inc.

One-second data from the ASSP and one of the optical array probes (OAP) is input to the BMS and output to the Kennedy recorder in 32 one-second groups. The BMS has additional capabilities that allowed analog input on 11 channels to be recorded. Three channels of the analog input were dedicated to liquid water content (LWC) devices. These instruments were the Rosemount, the Leigh MK10, and the Leigh MK12. Operator error resulted in loss of Rosemount LWC data for all but the last flight. The remaining analog channels received input from a variety of aircraft state devices. These parameters included indicated air speed, collective stick position, torque, fuel flow, altitude, and outside air temperature.

The cloud droplet instrumentation were fixed to the aircraft on two specially fabricated pylons. One pylon was designed to accommodate the ASSP-100 and the other to accept one OAP spectrometer. The two OAP spectrometers were dimensionally identical and could be interchanged as desired to accomplish specific goals.

ASSP-100

This device employs a light-scattering technique as is shown schematically in Figure 2-1. A highly collimated laser beam projects across a sample tube located on the outboard end of the instrument boom. Photo detectors measure the intensity of the light scattered out of the beam by

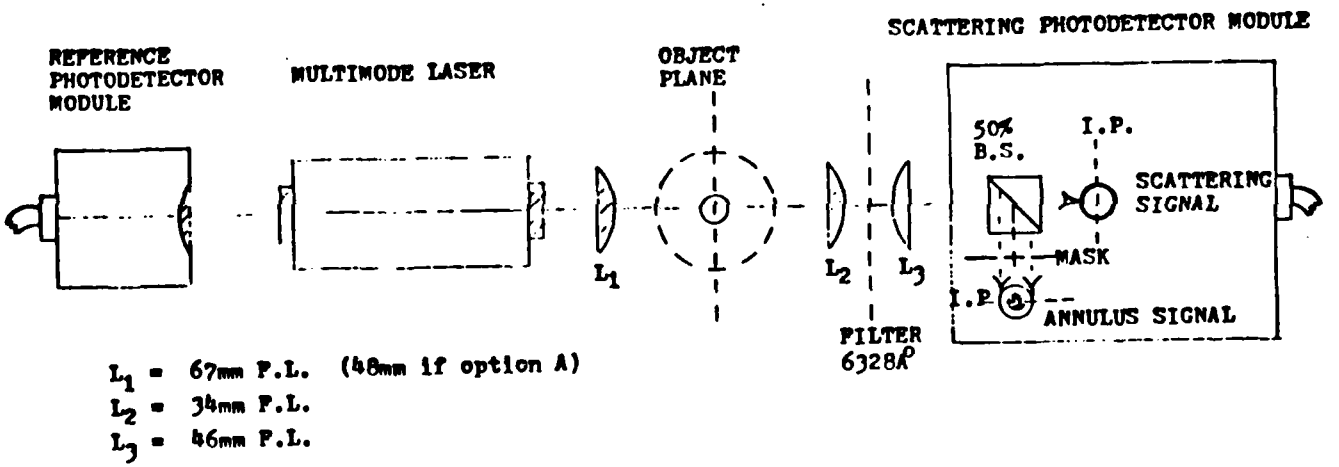

Figure 2-1 AXIALLY SCATTERING SPECTROMETER PROBE OPTICAL SYSTEM DIAGRAM

the cloud droplets as they pass through the sample area. For droplets in the size range measured by the ASSP-100 (3 to 45 μm), the scattered light intensity varies smoothly with droplet size as shown in Figure 2-2. The electronics and recording equipment register the observed number of droplets in each of fifteen size categories. The sample is normally one second in duration.

During the course of the test program, a noise problem became apparent in the ASSP measurement system. The cause, effect, and solution to this problem will be discussed later in this report.

Optical Array Spectrometers

The other two instruments in the MRI droplet measurement package were of the optical array type. A schematic representation of these devices is given in Figure 2-3.

A collimated laser beam is projected normal to the air flow (using mirror system) and is focused on a photo diode array. A droplet entering the light beam casts a shadow over part of the diode array, causing the recording system to register a count. The size of the droplet is determined from the number of elements in the diode array which are shadowed.

The cloud particle spectrometer and precipitation particle spectrometer function in this manner. The devices, while physically similar, contain different optics and, therefore, measure particles over different size ranges.

The characteristics of the three droplet sizing probes is summarized in Table 2-1.

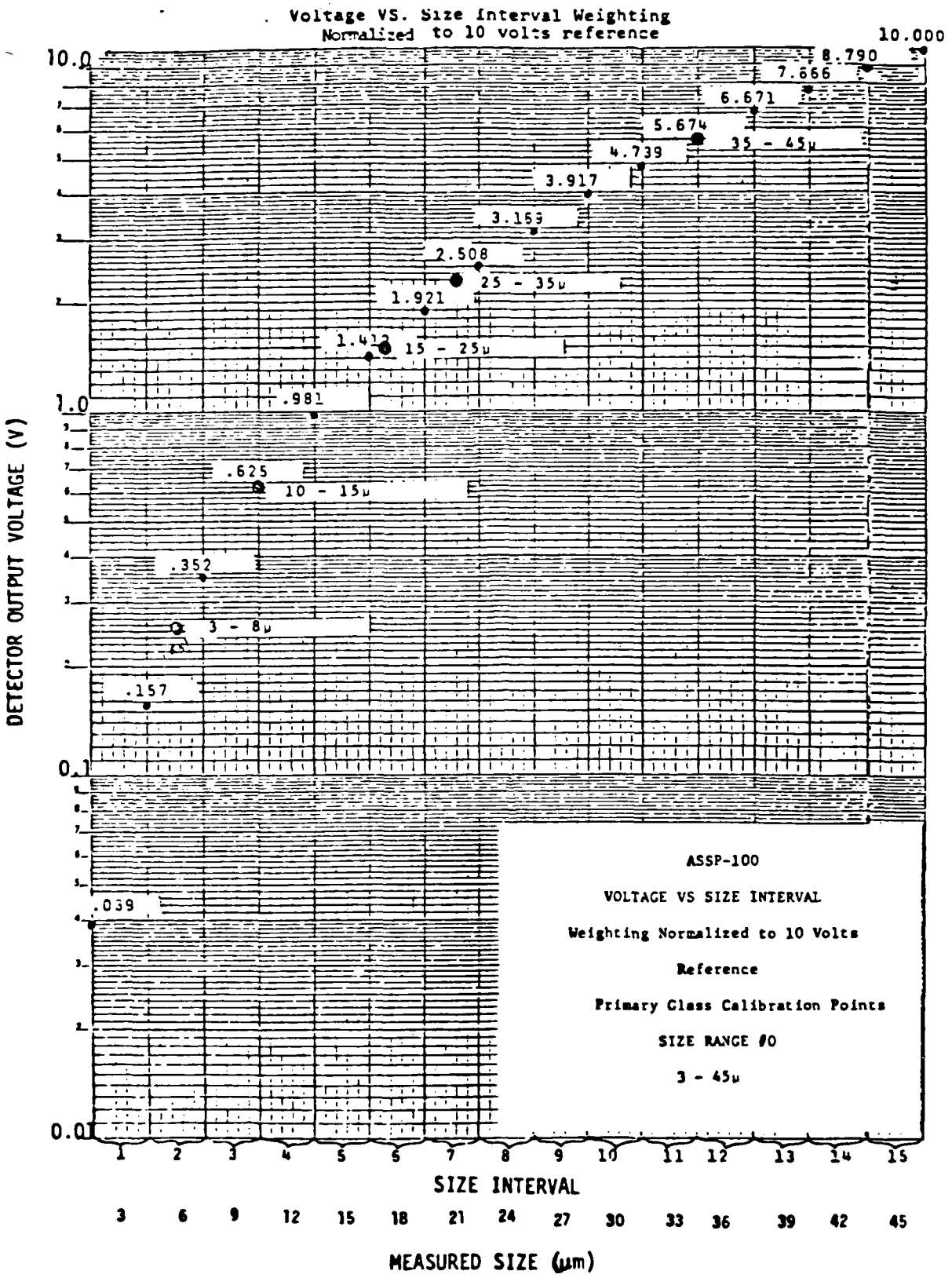

Figure 2-2 DETECTOR OUTPUT vs SIZE INTERVAL FOR THE ASSP

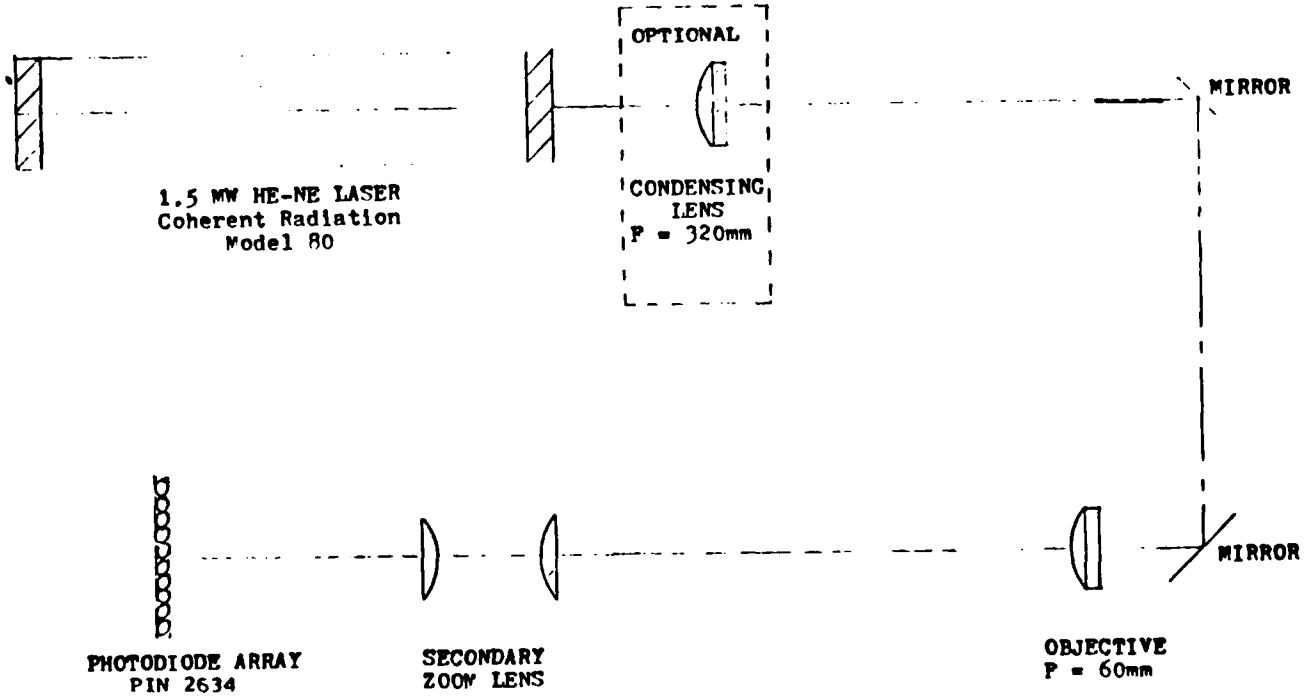

Figure 2-3 OPTICAL SYSTEM DIAGRAM FOR OPTICAL ARRAY SPECTROMETER

Table 2-1

DROPLET SIZING PROBE CHARACTERISTICS

	Droplet Size Interval (Diameter, μm)	No. of Size Classes
ASSP-100	3-45	15
OAP-200X	35-300	15
OAP-200Y	140-2100	15

Calibration Summary

The calibration of the ASSP, OAP-200X, and OAP-200Y was accomplished in three phases: (1) the initial calibration at MRI to check the measurement setting, (2) multiple field verification checks, and (3) the final calibration at MRI. Figure 2-2 is the reference voltage and size interval curve for the ASSP with three-micron intervals. The curve is used with glass bead measurements to ensure the proper output from the photo detector. The results of the calibrations are included as calibration reports on the following pages.

The calibration values were checked by using a single size of beads for each probe periodically while in the field. The probes were also checked for end element voltage to insure alignment. The calibrations were reviewed and checked on returning of the probes to MRI to ensure data accuracy. The results of these checks indicated the calibrations remained the same during the flight test program.

Calibration of the LWC devices and the other analog instruments measured by MRI are presented in Table 2-2.

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CALIBRATION REPORT

Date: 11/26/79

Instrument: DNA ASSP-100-1

Ch. #	Size 3-9 um glass beads	Size 10-15 um glass beads	Size 15-25 μm glass beads
0			
1	1189	406	
2	4111	526	198
3	6386	1431	271
4	4612	5111	641
5	2033	6285	1994
6	723	2622	3117
7	219	705	2166
8		360	1322
9			803
10			399
11			
12			
13			
14			
15			

Comments: Postflight probe calibration after EMB-121 icing flights.
Preflight probe calibration for Army helicopter icing flights.

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CALIBRATION REPORT

Date: 11/26/79

Instrument: DNA ASSP-100

Ch. #	Size	Size	Size
	25-35 um glass beads		
0			
1			
2			
3			
4			
5	295		
6	488		
7	924		
8	1424		
9	1304		
10	740		
11	431		
12	188		
13	59		
14			
15			

Comments: Postflight calibration after EMB-121 icing flights.

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CALIBRATION REPORT

Date: 1/8/80

Instrument: ASSP-100-1

Ch. #	Size 10-15 μm glass beads	Size 35-45 μm glass beads	Size
0	Nominal=CH. 4	Nominal=CH. 12	
1	1900		
2	5491		
3	7191		
4	8598		
5	5601		
6	5419		
7	5520		
8	2059		
9	1092	33	
10	438	42	
11	254	476	
12	93	560	
13	38	422	
14	53	157	
15	47	80	

Comments:

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CALIBRATION REPORT

Date: 1/18/80

Instrument: CLOUD PROBE

Ch. #	Size 210-250 μm glass beads	Size 35-45 μm glass beads	Size
0	Nominal=CH. 13	Nominal=CH. 1	
1		307	
2		23	
3		18	
4		12	
5		7	
6		4	
7			
8			
9			
10	1		
11	1		
12	11		
13	137		
14	6		
15			

Comments:

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CALIBRATION REPORT

Date: 3/1/80

Instrument: ASSP-100-1

Ch. #	Size 10-15 μm glass beads	Size 15-25 μm glass beads	Size
0	Nominal=CH. 4	Nominal=CH. 6	
1	1185		
2	1400	600	
3	4323]	410	
4	7191	285	
5	281	1442]	
6	106	2828	
7	54	632	
8	18	101	
9			
10			
11			
12			
13			
14			
15			

Comments:

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CALIBRATION REPORT

Date: 3/7/80

Instrument: CLOUD PROBE

Ch. #	Size	Size	Size
	210-250 μm glass beads		
0	Nominal=CH. 13		
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11	2		
12	20		
13	62		
14	27		
15	47		

Comments:

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CALIBRATION REPORT

Date: 3/13/80

Instrument: ASSP-100-2

Ch. #	Size 10-15 μm glass beads	Size 15-25 μm glass beads	Size 35-45 μm glass beads
0			
1	478		
2	960	235	
3	3151	459	
4	2189	1400	
5	400	1400	
6	113	953	
7		508	
8		319	
9			91
10			117
11			289
12			448
13			183
14			27
15			

Comments:

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CALIBRATION REPORT

Date: 3/24/80

Instrument: OAP - Cloud (20-300 µm)

Ch. #	Size 210-250 µm glass beads	Size 210-250 µm glass beads	Size 105-125 µm glass beads
0			
1			
2			
3			
4			9
5			118
6			210
7			110
8			33
9			10
10			8
11	12	18	
12	67	68	
13	81	112	
14	18	32	
15	3	2	

Comments:

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CALIBRATION REPORT

Date: 3/31/80

Instrument: ASSP-100-2

Ch. #	Size 35-45 μm glass beads	Size 10-15 μm glass beads	Size 15-25 μm glass beads
0	Nominal=CH. 12	Nominal=CH. 4	Nominal=CH. 6
1			
2		184	
3		250	28
4		394	37
5		177	75
6		33	110
7			63
8			31
9	14		16
10	28		
11	52		
12	47		
13	18		
14	5		
15			

Comments:

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Table 2-2

CALIBRATION VALUES FOR ANALOG CHANNELS

1. Altitude Calibration

Altitude (ft)	Voltage
0	0.06
1,000	0.55
2,000	1.04
3,000	1.53
4,000	1.96
5,000	2.39
6,000	2.81
7,000	3.21
8,000	3.60
9,000	3.97
10,000	4.34
11,000	4.69
12,000	5.03

2. Fuel Flow Calibration

Fuel Flow (gal hr^{-1})	Voltage
0	0.071
37.32	0.809
81.23	1.717
124.05	2.605
192.38	4.036
240.00	5.040

3. Indicated Air Speed Calibration

Air Speed (kts)	Voltage
0	0.073
20.0	0.170
40.0	0.460
60.0	0.960
80.0	1.660
100.0	2.560
120.0	3.690
140.0	5.050

Table 2-2 (Continued)

CALIBRATION VALUES FOR ANALOG CHANNELS

4. Leigh MK10 Calibration

Liquid Water Content ($g\ m^{-3}$)	Voltage
0	0
1.0	2.5
2.0	5.0

5. Rosemount Calibration

Liquid Water Content ($g\ m^{-3}$)	Voltage
0	0
1.0	5.016

6. Temperature Calibration

Temperature (°C)	Voltage
-30	0
0	1.75
+30	3.50

7. Torque Calibration

Torque (psi)	Voltage
0	0.057
10	0.818
20	1.653
30	2.497
40	3.347
50	4.201
60	5.050

8. Integrating Rate Unit Calibration

Counts	Voltage
0	0
999	5.0

Table 2-2 (Continued)

CALIBRATION VALUES FOR ANALOG CHANNELS

9. Collective Stick Calibration

Arc Inches	Voltage
0	0
4.51	2.168
10.66	5.026

Calibration of Water Flow Meter

After the field program was completed, a recalibration of the water flow meter on-board the HISS was performed. This recalibration revealed that the actual water flow was slightly less than that indicated on the gauge during testing. The water flow rates referenced in this report are indicated flows which are related to actual flows as given below:

Indicated (gal min^{-1})	Actual (gal min^{-1})
4.80	4.10
6.75	6.10
8.70	7.90
10.80	9.90
12.90	11.65
14.85	14.00
19.90	18.40

3. DATA REDUCTION

The objective of this report is to provide droplet data which characterized the helicopter icing spray system (HISS) plume as it existed in the 1980 field season. Based on the data obtained during 1979, the most useful information concerning the HISS plume characteristics can be learned from vertical and horizontal surveys made under a variety of conditions with additional data on LWC variability obtained by holding in the center of the cloud.

Certain characteristics of the plume and operational restrictions resulted in a data set which required careful analysis to extract information which, as near as possible, represented the cloud penetrated by the HISS.

Due to the limited number of survey missions for which data were available and due to the careful data treatment required, a "hand" reduction was undertaken. This procedure involved reviewing the one-second droplet data obtained during the surveys.

It was found at the outset that vertical profiles provided the best characterization of the physical plume, but that steady state points provided the most reproducible LWC information.

Droplet size and LWC are dependent upon vertical position in the HISS plume. This dependency, and the absence of adequate vertical position information, made analysis of survey data difficult.

It was decided to plot all the data for each flow rate for each vertical sweep into a drop size distribution and LWC profile plot. A curve of best fit through these points represents the vertical and horizontal cross section information.

The steady state data were examined and a most representative one-second point was selected for each HISS flow rate and standoff distance. The selected one-second points compare remarkably well with both 16-second and 32-second averages for each exposure and could have been used interchangeably with those average values.

To convert the droplet count data to estimates of concentration, a series of processing steps are made. These are explained below for each of the droplet probes.

ASSP-100

The small droplet probe operated on a light-scattering principle as described in Section 2. The cross sectional area of the laser beam is given as the sample area. The sample area times the true air speed yields the sample volume, usually expressed in cubic meters. The number of droplets counted in each channel is divided by the sample volume to give a droplet count per cubic meter. The mass per droplet multiplied by the droplet count will give the LWC for each channel. The sum of all 15 channels will yield the LWC measured over the total probe measurement range. An example of the process is given below:

Assume a sample area (measured and given by the manufacturer during probe calibration) of 0.332 mm^2 and a true air speed of 46.4 m s^{-1} (90 kts); the sample volume (V_s) is given as:

$$V_s = \text{sample area} \times \text{true air speed} \times \text{sample period} \qquad (3\text{-}1)$$

$$= 0.332\ mm^2 \times 46.4\ m\ s^{-1} \times 1\ sec$$

$$= 1.54 \times 10^{-5}\ m^3$$

then given 30 counts in the 21 μm channel yields;

$$\# \text{ m}^{-3} = 30/1.54 \times 10^{-5} \text{ m}^3 \quad (3\text{-}2)$$

$$= 1.9\text{[illegible]} \times 10^6 \text{ 21 } \mu\text{m drops in a cubic meter}$$

the mass of a 21 μm diameter drop can be calculated as:

$$\text{volume} = 4/3\ \pi \left(\frac{21}{2}\ \mu\text{m}\right)^3 \quad (3\text{-}3)$$

$$= 4.85 \times 10^{-9} \text{ cm}^{-3}$$

but for water, 1 $\text{cm}^{-3} \approx$ 1 gram so the mass is given as 4.85×19^{-9} g

the liquid water content of the 21 μm channel can be expressed as

$$LWC_{21} = 1.94 \times 10^6 \text{ m}^{-3} \times 4.85 \times 10^{-9} \text{ g} \quad (3\text{-}4)$$

$$= 0.009 \text{ g m}^{-3}$$

Optical Array Spectrometers (Data Reduction)

Droplets larger than 45 microns were measured with optical array spectrometers (either the cloud particle spectrometer or precipitation particle spectrometer). These devices generate count data for 15 drop size classes which can be converted to estimates of the actual drop concentrations.

The form of the conversion equation is similar to that of the ASSP, however, for optical array probes, sample area varies with channel number as

$$A_i = \Delta D \times (K - i) \times L \quad (3\text{-}5)$$

where

ΔD = nominal channel width (drop size interval)

and

L = 6.1 cm

K = N-1

where

N = number of sensitive elements in the photodiode array

Sample areas used in the analysis of cloud probe data require a correction for depth of field. This correction applies to size classes one through seven and has the following form:

$$A_{1\text{-}7} = A_i \times \left(\frac{i}{8}\right)^2 \qquad (3\text{-}6)$$

where

A_i is calculated as in Equation (3-5)

A summary of sampling characteristics of the droplet probes is presented in Table 3-1.

The data reduction scheme described yields droplet concentration estimates for the various drop sizes measured by the probes. This is the basic parameter describing the drop size distribution, and the parameter which can be used to calculate such things as particle concentration, mean particle size, liquid water content, median volume diameter, etc.

The measured droplet concentrations are presented in a series of figures in the next section. Logarithmic scales are used for both concentration and drop diameters since each varies over several orders of magnitude.

For each number distribution figure, a mass distribution is included. Mass distribution is simply droplet concentration weighed by the mass of a droplet of the appropriate size,

$$m_i = \frac{\pi}{6} D_i^3 \times \text{density of water}$$

then

$$M_i = \rho_i \times m_i$$

where

M_i = quantity plotted in Section 4

ρ_i = droplet concentration as given in Section 4

m_i = mass of droplet of size observed in Channel i

Table 3-1

SAMPLING CHARACTERISTICS OF THE PMS PROBES USED ON THE
1979-1980 HELICOPTER ICING PROGRAM

	Axially Scattering Probe (ASSP-100)				Cloud Probe (OAP-200X)				Precipitation Probe (OAP-200Y)			
Channel	Size Interval (μm)	Mean Size (μm)	Sampling Area (mm^2)	Sample Volume* (cm^3)	Size Interval (μm)	Mean Size (μm)	Sampling Area (cm^2)	Sample Volume* (cm^3)	Size Interval (μm)	Mean Size (μm)	Sampling Area (cm^2)	Sample Volume* (m^3)
1	3	3	0.332	15.4	14	35	0.0042	19.5	140	140	15.4	0.0713
2	3	6	0.332	15.4	15	49.5	0.016	74.3	140	280	14.5	0.0674
3	3	9	0.332	15.4	15.4	64.7	0.0343	159	140	420	13.7	0.0634
4	3	12	0.332	15.4	17.6	81.2	0.058	269	140	560	12.8	0.0594
5	3	15	0.332	15.4	20	100	0.0858	398	140	700	12.0	0.0555
6	3	18	0.332	15.4	20	120	0.117	541	140	840	11.1	0.0515
7	3	21	0.332	15.4	20	140	0.149	693	140	980	10.2	0.0476
8	3	24	0.332	15.4	20	160	0.183	849	140	1120	9.39	0.0436
9	3	27	0.332	15.4	20	180	0.1708	793	140	1260	8.54	0.0396
10	3	30	0.332	15.4	20	200	0.1586	736	140	1400	7.69	0.0357
11	3	33	0.332	15.4	20	220	0.1464	679	140	1540	6.83	0.0317
12	3	36	0.332	15.4	20	240	0.134	623	140	1680	5.98	0.0277
13	3	39	0.332	15.4	20	260	0.122	566	140	1820	5.12	0.0238
14	3	42	0.332	15.4	20	280	0.1098	509	140	1960	4.27	0.0198
15	3	45	0.332	15.4	20	300	0.0976	453	140	2100	3.42	0.0159

* Calculated for a nominal 90 kt true air speed and a one-second sample period

An inventory of all data tapes recorded is given in Table 3-2, and the chronology of the field program is given in Table 3-3.

Evaluation of Noise Problem

Early in the field program, constant counts in Channel 1 of the ASSP were detected. The counts were near 1900 per second. While the source was unknown, the number was considered insignificant since the LWC contained in Channel 1 is very small. For example, the maximum number of counts possible in the first channel is 9999 and, at 90 knots true airspeed, that amounts to a maximum of 0.009 g m^{-3} LWC. As the program progesssed, a factor of two in LWC became apparent in the HISS Measurements. While the factor was cause for concern, recalibration of the ASSP revealed no apparent probe problems. Since the ASSP and the other LWC devices have historically not compared behind the HISS and since the vertical variation of LWC was large, it was concluded that possibly the LWC measurement might be reasonable. However, when the factor of two was evident in natural icing events, real alarm prevailed since the other LWC instruments and the ASSP are in close agreement under those conditions. After two recalibrations in the field indicated no apparent problem, the probe was hand-carried to the manufacturer for complete checkout. The manufacturer could detect no hardware problem with the instrument, but mentioned that the noise in Channel 1 could be enough to disable the velocity rejection circuitry. The velocity rejection feature of the probe eliminates those droplets which pass through the fringe areas of the sampling beam and are thus not sized correctly. This is done by computing an average beam transit time (electronically, a pulse width) for the particles and rejecting all particles with transit times shorter than the average. Nominally, this value is near 50 percent for the sampling techniques and airspeed in this program. When noise is introduced, it is interpreted as an immense number of particles with very short transit times. The average particle transit time becomes severely biased toward the short end and thus all real particles, whether in the fringe area or not, are larger than the average and accepted. On the premise that the noise was the problem, a search for the cause was started. No clear-cut source was found, but the

Table 3-2

1980 U. S. ARMY HISS FIELD TAPE INVENTORY
METEOROLOGY RESEARCH, INC.

MRI Tape #	Aircraft Flight #	OAP Probe	Aircraft	Date	Comments
101	--	CPS	318	1/8/80	System test tape
102	--			1/10/80	System test tape
103	1			1/12/80	A/C IPS system checkout
104	2			1/18/80	A/C IPS system checkout
105	3			1/21/80	HISS flight with standard sampling pattern, low boom air pressure
106	4			1/23/80	HISS flight, unable to establish water flow
107	7			2/1/80	HISS flight, numerous nozzles blocked by freezing
108	8			2/2/80	HISS flight with standard sampling pattern at two standoff distances
109	9			2/4/80	HISS flight with standard sampling pattern at two standoff distances
110	10	CPS		2/6/80	HISS flight with center stable points at two temperatures
111	11	PPS		2/7/80	HISS flight with center stable points
112	12	CPS		2/8/80	HISS flight with center stable points, ice on ASP
113	13			2/11/80	HISS flight with center stable points
114	14	CPS	318	2/13/80	Natural ice

Table 3-2 (Contd)

1980 U. S. ARMY HISS FIELD TAPE INVENTORY
METEOROLOGY RESEARCH, INC.

MRI Tape #	Aircraft Flight #	OAP Probe	Aircraft	Date	Comments
115	16	CPS	318	2/18/80	Natural ice
116	17	"	"	2/23/80	Natural ice
117	--	N/A	717	2/29/80	Clear sky test run
118	--	N/A	717	3/5/80	HISS flight - 1 data point
119	19	CPS	318	3/7/80	HISS flight with center stable points
120	20	"	"	3/12/80	Natural ice
121	21	"	"	3/12/80	Natural ice
122	23	PPS	"	3/20/80	Natural ice
123	25	"	"	3/24/80	Natural ice
124	26	"	"	3/24/80	Natural ice
125	27	"	"	3/24/80	HISS flight with center stable points, gusty wind conditions
126	28	"	"	3/26/80	Natural ice

Table 3-3

CHRONOLOGY OF HISS FIELD PROGRAM
METEOROLOGY RESEARCH, INC.

Date	Activity
12/13/79	Install equipment at Edwards AFB and perform test flight
1/7/80	Field program begins in St. Paul, MN
1/8/80	Test tape generated, ASSP-100 and CPS calibrated
1/9/80	Analog channels on BMS calibrated
1/10/80	Test tape generated
1/12/80	HISS flight
1/15/80	Analog data cable replaced after failure
1/18/80	ASSP-100 and CPS calibrated, HISS flight
1/21/80	HISS flight, some concern over apparent high LWC indications
2/1/80	HISS flight
2/2/80	HISS flight
2/4/80	HISS flight
2/6/80	HISS flight, LWC still appears high
2/7/80	HISS flight
2/8/80	HISS flight, ASP freezes in flight
2/11/80	HISS flight
2/13/80	Natural flight, factor of 2 in LWC between ASSP and other probes noticeable and unexplained
2/18/80	Natural flight, factor of 2 still apparent
2/23/80	Natural flight, ASSP calibrated
2/25/80	ASSP mounted on Blackhawk
3/1/80	ASSP calibrated
3/2/80	ASSP returned to manufacturer for testing
3/3/80	No apparent problem with ASSP
3/5/80	HISS flight on Blackhawk
3/6/80	Power source noise on ASSP postulated as problem and cable changed
3/7/80	HISS flight, noise appears corrected
3/9/80	ASSP calibrated
3/12/80	Two natural flights, noise has returned
3/15/80	New ASSP installed - no more noise problems
3/20/80	Natural flight
3/24/80	Two natural, one HISS flight
3/26/80	Natural flight
3/31/80	ASSP calibrated, analog channels calibrated
4/1/80	End of field program

data cable to the probe and electronics box was replaced. The noise vanished in ground testing after cable replacement but soon returned in-flight and in successive flights. It was then determined that complete change of instruments was necessary. A new ASSP and electronics box was installed and the noise problem was eliminated. To recover the data obtained with the previous probe, a series of tests was performed on the aircraft while under its own power. The results of this test are given in Table 3-4. The testing showed the problem was unique to 400 Hz aircraft power and the old ASSP-electronics system. Furthermore, the 400 Hz was reproduced in the laboratory and shown to disable the velocity rejection.

The procedure to recover the old ASSP data was straightforwrd. The flights where that sampling system was flown were examined for noise. The analysis revealed a constant noise value of 1900 ±10 percent for all flights except those when the cable was changed (#19, #20). For those flights where constant noise was observed, the velocity rejection was simulated numerically by reducing the counts per channel by one-half. In addition, 1900 counts were subtracted from Channel 1. The LWC obtained from this procedure compares favorably with calculated LWC for this HISS and with the other LWC devices in natural icing encounters. The noise problem had no effect on MVD calculation. Further laboratory testing is being undertaken to establish a hardware fix to the system so the probe may be returned to service.

TABLE 3-4

FIELD NOISE EVALUATION

Test No.	Probe 1	Probe 2	Box 1	Box 2	Power (Cycles)	Channel 1 (Counts)
1	X		X		400	1000
2	X			X	400	100
3		X	X		400	0
4		X		X	400	20
5	X		X		60	100
6		X	X		60	0
7		X		X	60	0
8	X			X	60	0

4. DISCUSSION

This section presents the results of analysis of the data collected during the field program. There are five parts to the discussion: a physical description of the HISS cloud, the effects of changing water flow rates, the humidity effects on droplet distributions, the range or standoff effects, and the comparison of these data with the 1978-1979 program results. However, before those items are discussed, a few general comments on the artificial cloud environment and measurement techniques should be mentioned.

First, in a natural cloud, the median volumetric diameter (MVD) is a good indicator of the central point in the distribution about which most of the mass is clustered. In an artificial cloud, the MVD can be misleading without some measure of the mass dispersion. Mass can extend in droplets as large as 220 μm, but be compensated by droplets in the small end of the spectrum, yielding a reasonable MVD. Fortunately, in the present HISS cloud, at nominal water flows, most of the mass is confined in a fairly narrow band between 15 and 45 μm. However, some mass is present at the larger droplet ranges and must be considered when examining ice buildup and component performance.

Second, natural cloud distributions can be represented as smooth curves in both droplet concentration and mass concentration plots; this is not the case for artificially produced clouds. Even the best performing nozzles have preferred droplet sizes in multiple areas of their distributions. These "humps" in an otherwise smooth distribution curve become greatly exaggerated when the nozzles "break down" (that is, when they are operated outside the recommended performance envelope). Typically, this occurs when the water pressure (flow rate) exceeds the air pressure and the nozzles begin to sputter. Frequently, this sputter or breakdown is evident as a change in droplet size distribution well before it is visible, if ever, to the eye.

Finally, the accuracy of the LWC measurement using the laser probes must be addressed. The probes are designed as droplet sizing instruments, not LWC devices. In the ASSP, the droplets are sized in 15 channels of 3 μm bandwidth. For example, the counts in Channel 7 (21 μm), represent droplets between 19.5 and 22.5 μm. This range is not a significant difference in size, but the range can be significant in LWC. The LWC contained in each channel is the product of the number of droplets counted and the mass of the droplet at the channel midpoint (in this example, 21 μm). For illustration, assume a droplet count of 0.167×10^8 # m^{-3}: for 21 μm droplets, this yields 0.08 g $^{-3}$ liquid water; for 22.5 μm droplets (the upper limit of the size bin), the LWC is 0.10 g m^{-3}. This is a difference of 25 percent in Channel 7 alone and arises from the fact that, while size change is linear, volume increases as the cube of the radius. Of course, while 25 percent overestimation in LWC is entirely possible, the droplets might easily have been 19.5 instead of 21 μm, and an underestimation would result. The point is that a variation of 10 to 20 percent in LWC is a reasonable figure.

Physical Cloud Description

Early in the data analysis effort, it became clear that both MVD and LWC varied significantly in the vertical across the HISS plume. These effects greatly complicated efforts to determine "mean" drop size distributions for the vertical plume surveys.

To illustrate the variation of droplet size, a diagram of MVD vs vertical position in the HISS Plume is presented in Figure 4-1. This figure is constructed from the second-by-second data for a series of vertical sweeps of the HISS plume.

Figure 4-1 illustrates that droplet size increases from near 30 microns at the top of the visible plume to more than 50 microns at the bottom. This "size sorting" effect is consistent with the buoyant effects

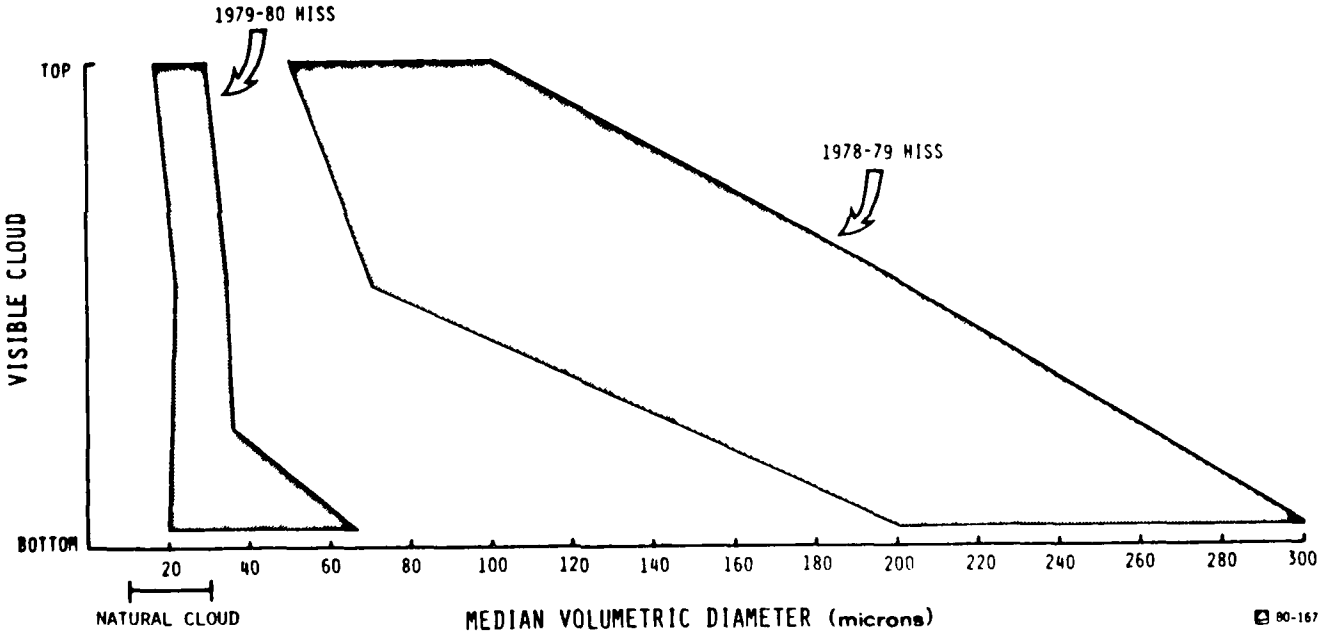


Figure 4-1 VERTICAL VARIATION OF MVD IN THE HISS CLOUD

observed for small drops. The increase in MVD is not due to an increased number of larger droplets at the bottom but rather to the absence of smaller ones. The increase of MVD at the bottom of the cloud occurs at extremely low LWC and should be no reason for concern. As is obvious from Figure 4-1, the current HISS cloud represents a vast improvement over the 1978-1979 cloud in MVD in all areas of the plume.

The variability of LWC observed in vertical sweeps of the HISS plume is illustrated in Figure 4-2. The three vertical profiles presented in this figure show a core of high LWC slightly below center bounded above and below by regions with lower LWC. Figures 4-3 through 4-5 illustrate how well the LWC curve fits the observed data. The consistent below center bulge at all water flow rates seems to indicate that the lower HISS boom is expelling more water than the upper boom.

It is clear from Figure 4-2 that observations of plume LWC are subject to large effects for relatively small vertical displacements. Note that a 1-foot displacement upward from cloud center at 5 gal min^{-1} could result in a decrease in measured LWC from 0.4 g m^{-3} to less than 0.3 g m^{-3}. Also note that the constant cloud center measurement point apparently are not at the point of peak, in-cloud LWC. Furthermore, neither the measured center point nor the peak point in LWC would be the LWC to characterize the average cloud. In fact, the area under each curve represents the total LWC contained in the cloud. Table 4-1 illustrates the average cloud LWC and values above and below cloud center. The average cloud LWC should compare with calculated LWC given an assumed cloud size and water flow rate. Figure 4-6 shows the LWC variation in the cloud for horizontal sampling sweeps. The curves show a steep "tailing" at the cloud edges and relatively constant values in between. No MVD plot is presented since no discernible change could be noted from side to side.

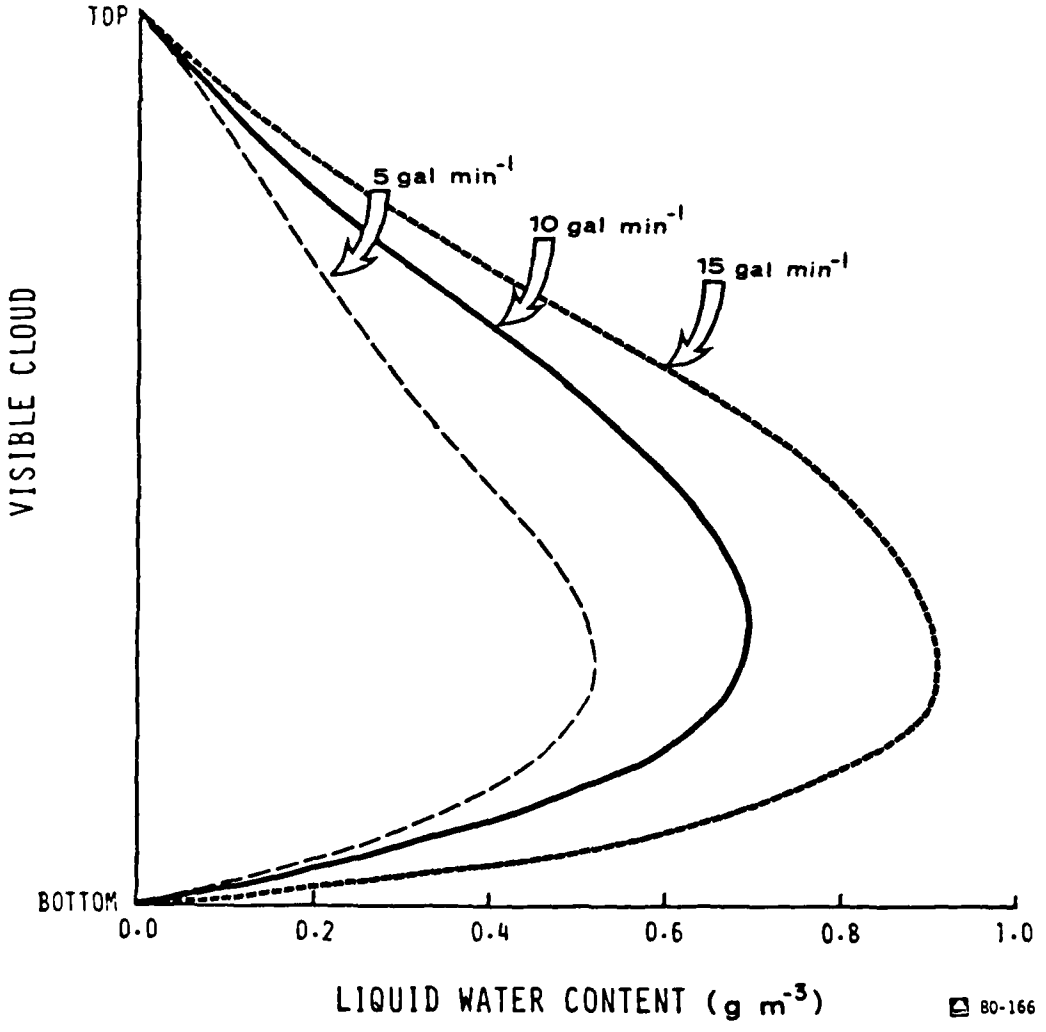


Figure 4-2 VERTICAL VARIATION OF LWC FOR THE 1979-1980 HISS CLOUD

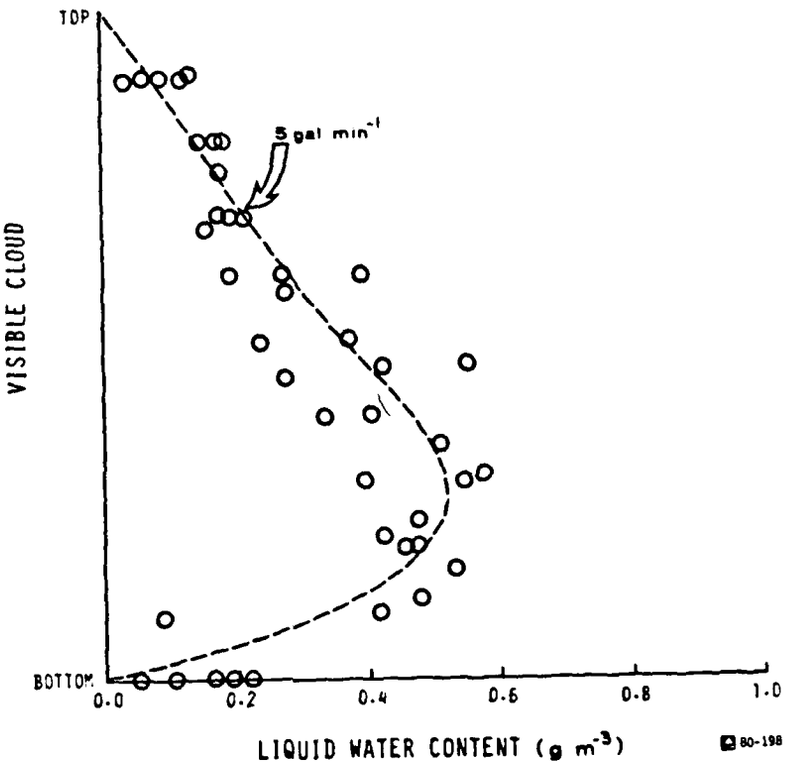


Figure 4-3 VERTICAL VARIATION OF LWC FOR THE 1979-1980 HISS CLOUD FLOWING 5 gal min^{-1} FROM FLIGHTS NO. 8 AND NO. 10

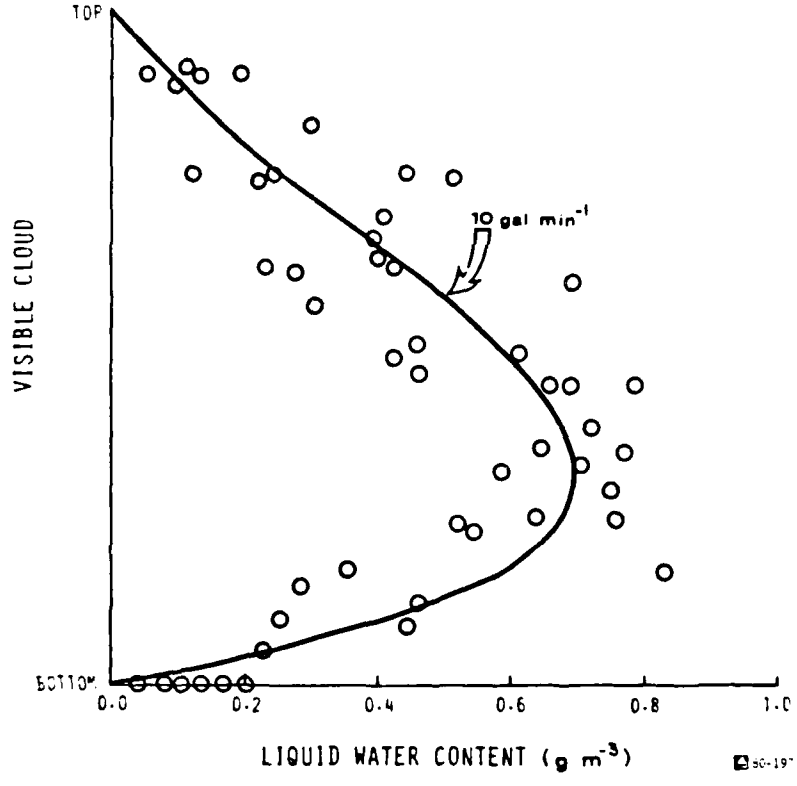


Figure 4-4 VERTICAL VARIATION OF LWC FOR THE 1979-1980 HISS CLOUD FLOWING 10 gal min^{-1} FROM FLIGHTS NO. 8 AND NO. 10

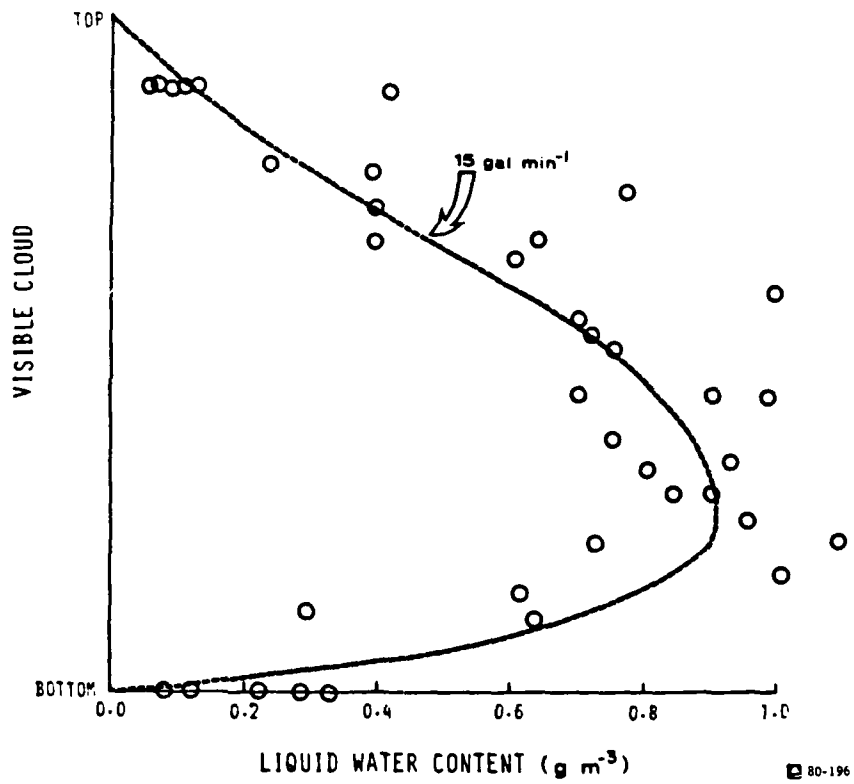


Figure 4-5 VERTICAL VARIATION OF LWC FOR THE 1979-1980 HISS CLOUD FLOWING 15 gal min^{-1} FROM FLIGHTS NO. 8 AND NO. 10

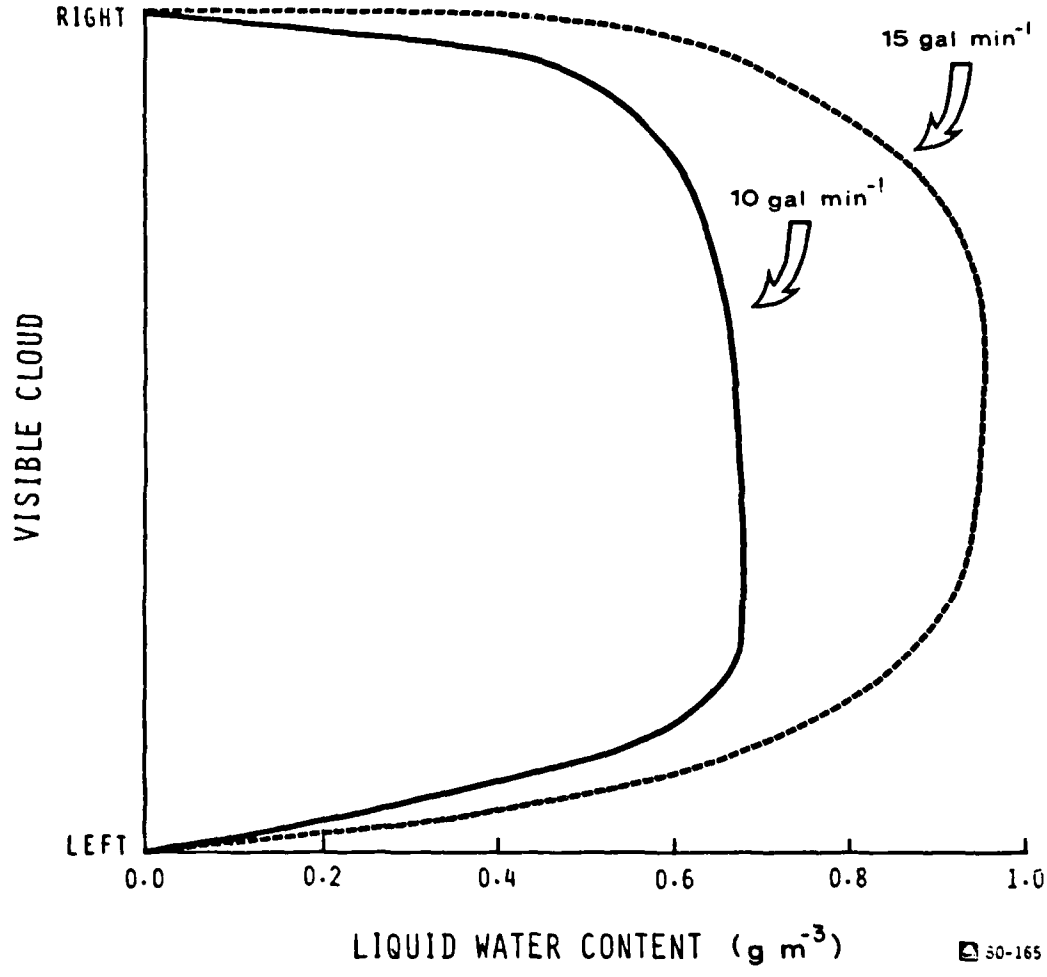


Figure 4-6 HORIZONTAL VARIATION OF LWC IN THE 1979-1980 HISS CLOUD

Table 4-1

AVERAGE CLOUD LIQUID WATER CONTENT
AND VALUES ABOVE AND BELOW CLOUD CENTER

Water Flow Rate (gal min^{-1})	Average Cloud LWC[1] ($g\ m^{-3}$)	+2 ft LWC[2] ($g\ m^{-3}$)	-2 ft LWC[3] ($g\ m^{-3}$)
5	0.29	0.20	0.53
10	0.46	0.25	0.65
15	0.63	0.35	0.90

[1]Assumes uniform distribution of water throughout the cloud
[2]LWC 2 feet above center cloud
[3]LWC 2 feet below center cloud

Flow Rate Effect

During most HISS sampling flights, a steady state point was measured near the cloud center. The procedure was to h[illegible] the probes near the center for about 30 to 120 seconds at each of the various water flow rates. A plot of water flow rate versus measured LWC is given in Figure 4-7. The two solid lines represent the LWC expected if all the water available at each flow rate was distributed uniformly throughout the entire 8 ft x 32 ft and 8 ft x 36 ft cloud areas. Most points lie slightly above and parallel to the 8 ft x 32 ft line. The measured LWC is expected to be greater throughout both areas than the expected average LWC since the LWC in center cloud is greater than the average LWC due to the variation of LWC in the vertical. The scatter of most points is $\pm 0.05\ g\ m^{-3}$ which is remarkable considering they were measured on different days under different conditions. The scatter becomes greatly increased when water flows become greater than 20 gal min^{-1}.

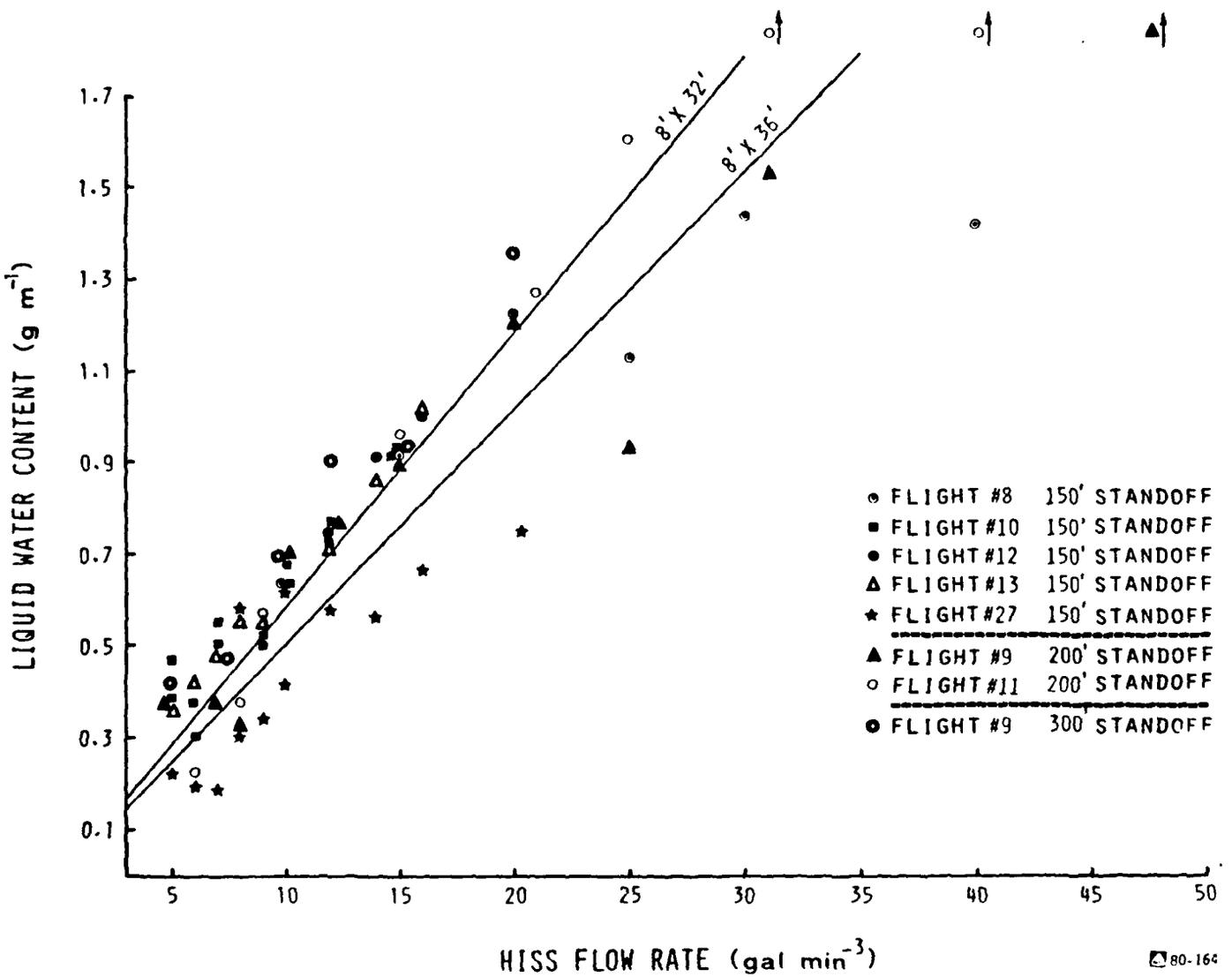


Figure 4-7 MEASURED LWC vs FLOW RATE FOR THE 1979-1980 HISS

Water pressure overcomes air pressure at flows greater than 20 gal min^{-1} and as the control on the nozzles breaks down, measured LWC values become erratic and unreliable. Figures 4-8 and 4-9 show the effects of nozzle breakdown in number and mass distribution. Nominally, an insignificant amount (<0.05 g m^{-3}) amount of mass was present in the precipitation probe (droplets >140 μm) but, at the few high water flow rate points tested, there did appear to be larger droplets. In Figure 4-7, Flight #27 LWC appears much lower than the other flights. This might be due to the fact that those points were sampled under gusty, high wind conditions and either the cloud was larger (about 8 ft x 40 ft) or a stable cloud center point might not have been achieved. Figures 4-10 through 4-13 show droplet and mass concentrations for three different flow rates. In each case, the number concentration and mass increases with increasing water flow. The MVD also increases slightly with water flow from near 20 μm at 5 gal min^{-1} to 28 μm at 20 gal min^{-1}.

Figures 4-14 and 4-15 present droplet concentration data on two occasions with differing relative humidities. The selected points were made at the same standoff range and LWC to minimize the effect of these variables.

The high and low relative humidity (RH) examples presented in Figures 4-14 and 4-15 have similar droplet concentrations in the 25 to 45 micron size range. The low RH case, however, exhibits a much lower concentration of small droplets (<20 microns). This feature is consistent with evaporative effects but may include the effects of other variables such as air temperature.

The effect of standoff range is illustrated in Figure 4-16 and 4-17, which present drop size distributions for 150 and 300 ft. No significant range effect could be determined.

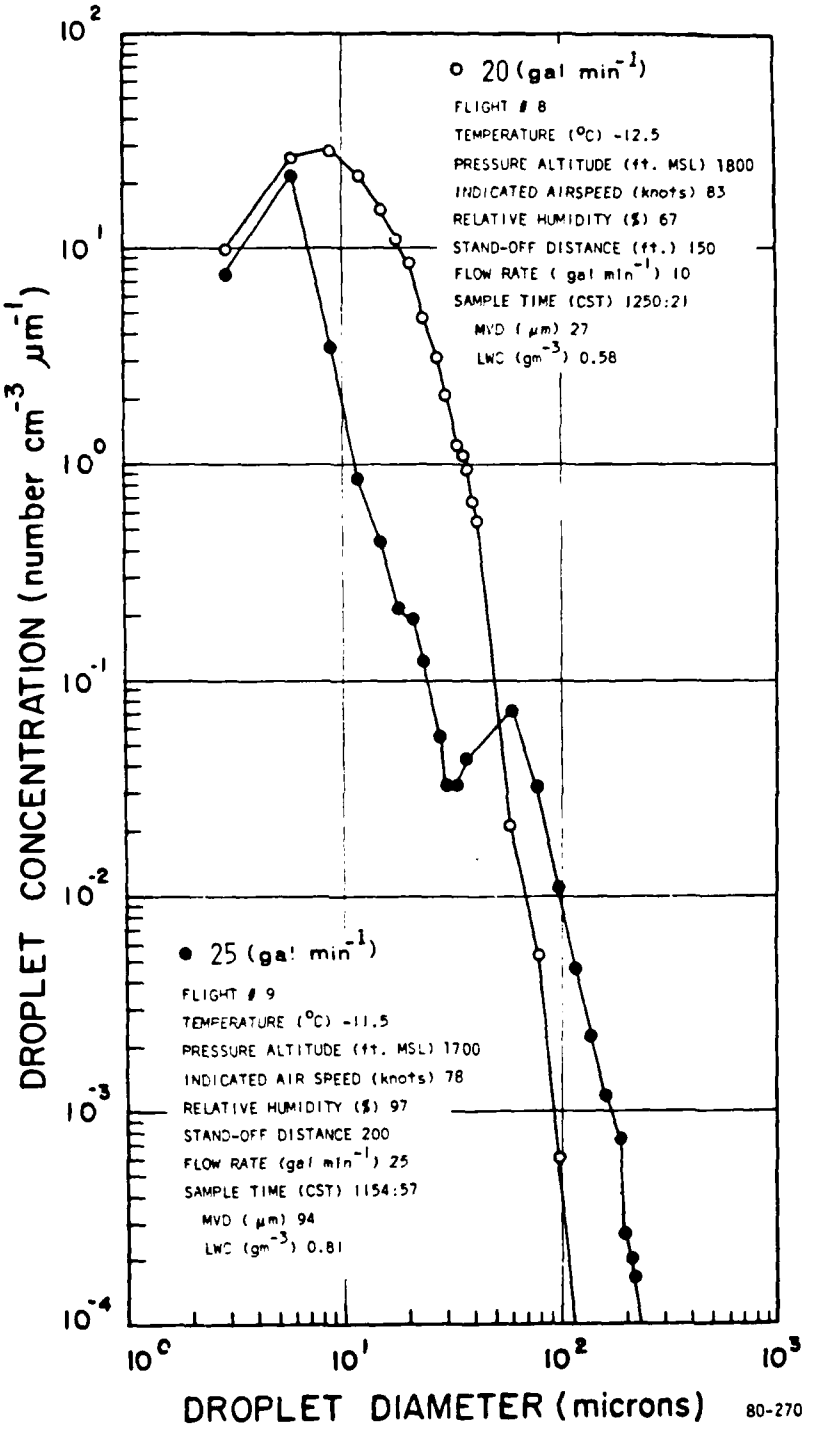


Figure 4-8 CHANGE IN DROPLET CONCENTRATION WITH NOZZLE BREAKDOWN

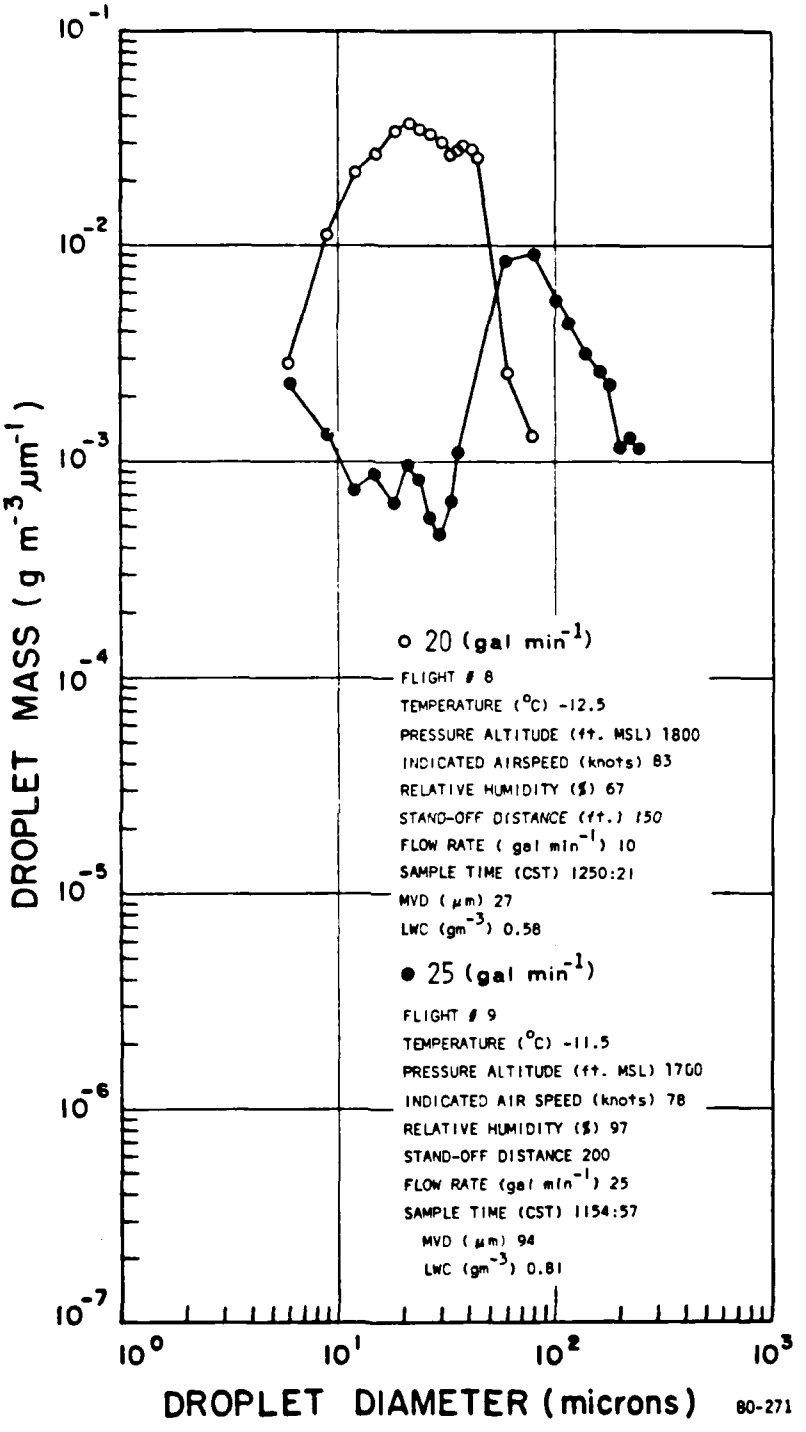


Figure 4-9 CHANGE IN DROPLET MASS WITH NOZZLE BREAKDOWN

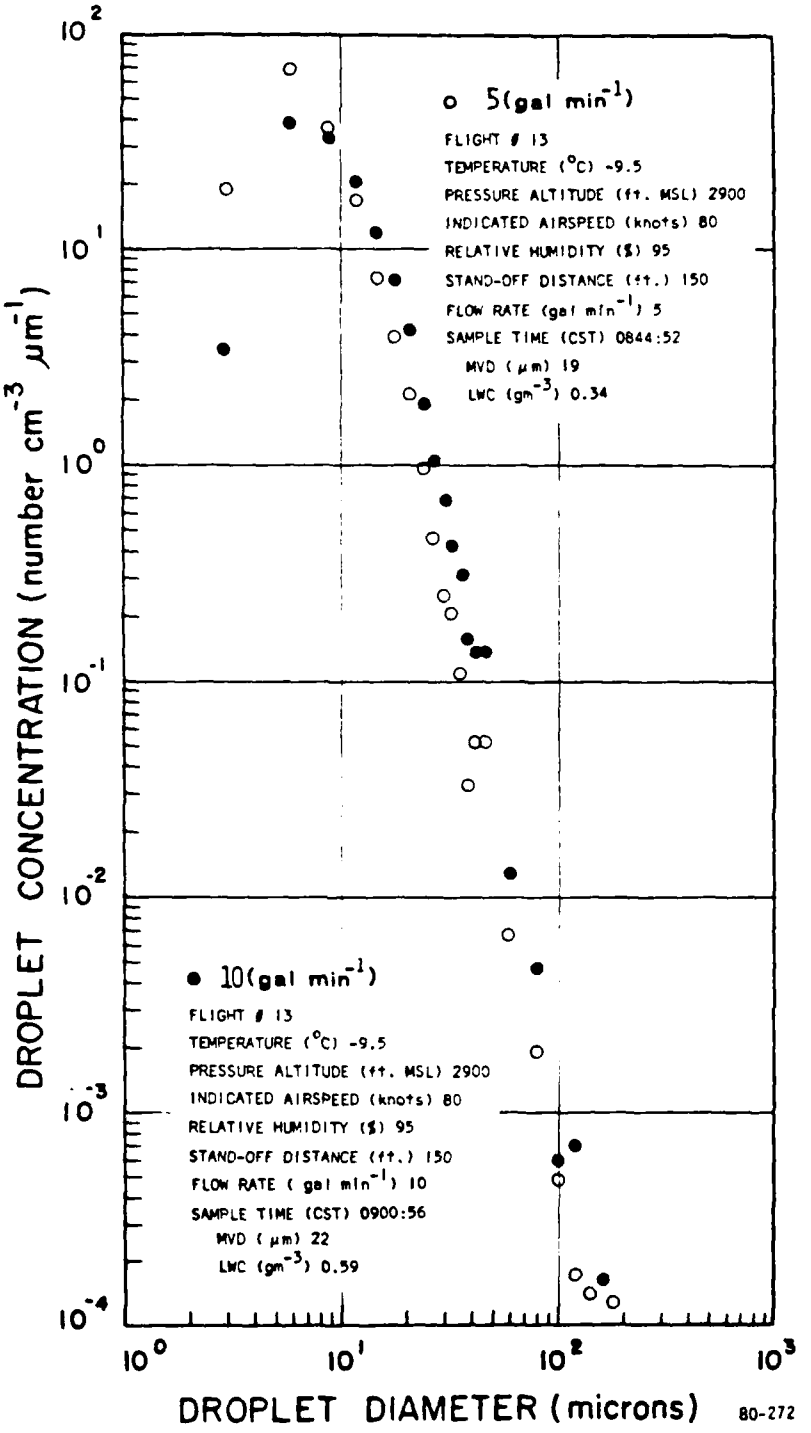


Figure 4-10 CHANGE IN DROPLET CONCENTRATION DISTRIBUTION BETWEEN WATER FLOWS OF 5 AND 10 gal min^{-1}

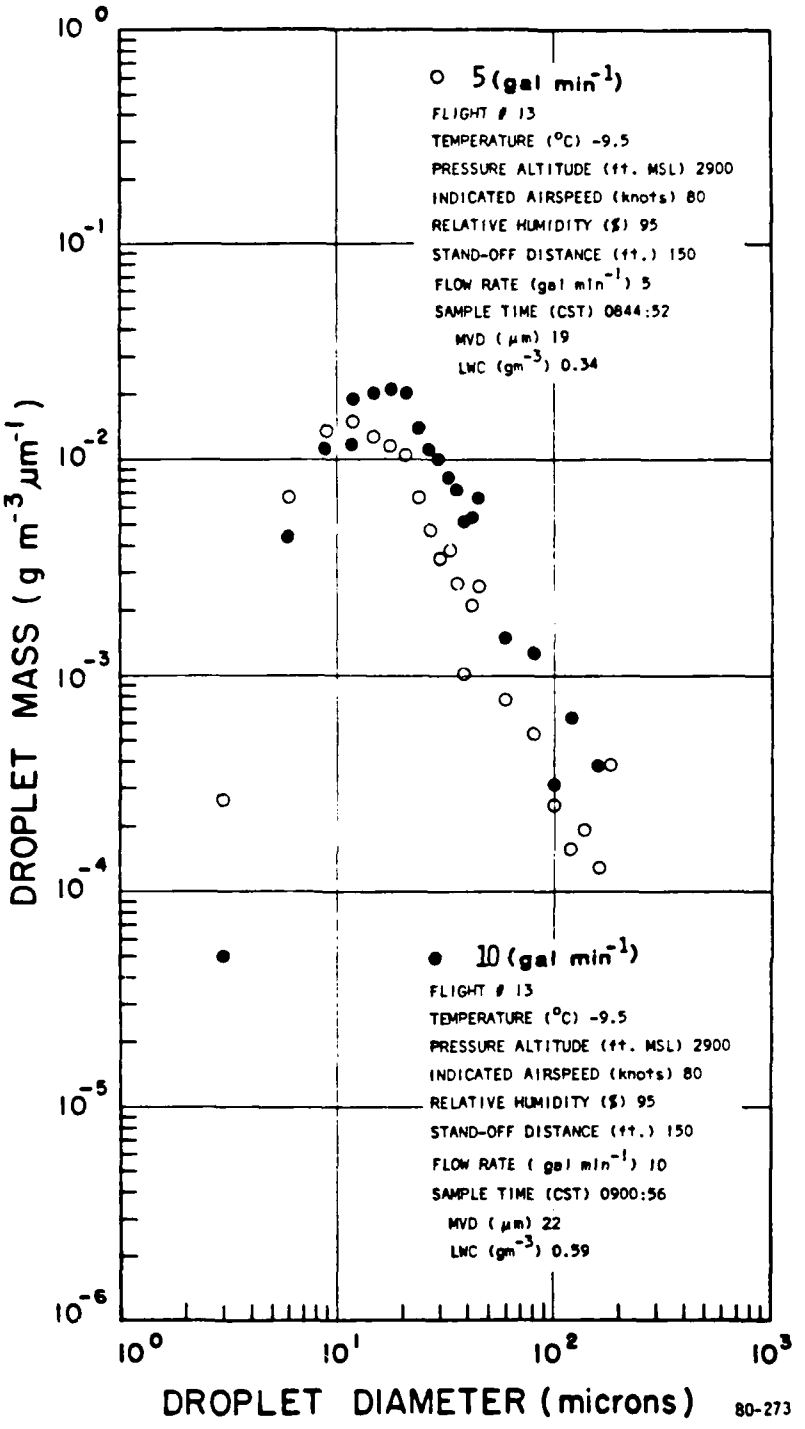


Figure 4-11 CHANGE IN DROPLET MASS DISTRIBUTION BETWEEN WATER FLOWS OF 5 AND 10 gal min^{-1}

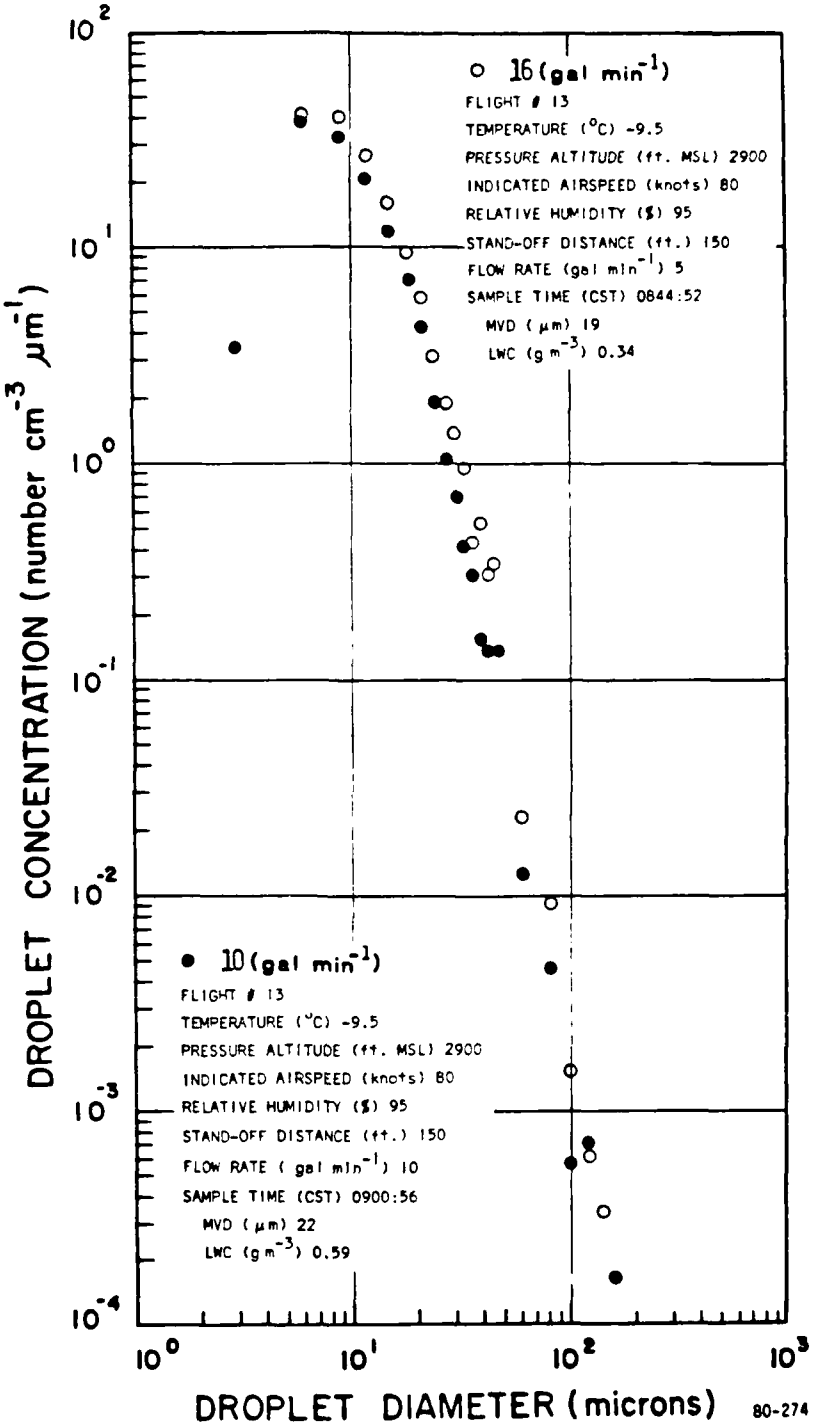


Figure 4-12 CHANGE IN DROPLET CONCENTRATION DISTRIBUTION BETWEEN WATER FLOWS OF 10 AND 16 gal min^{-1}

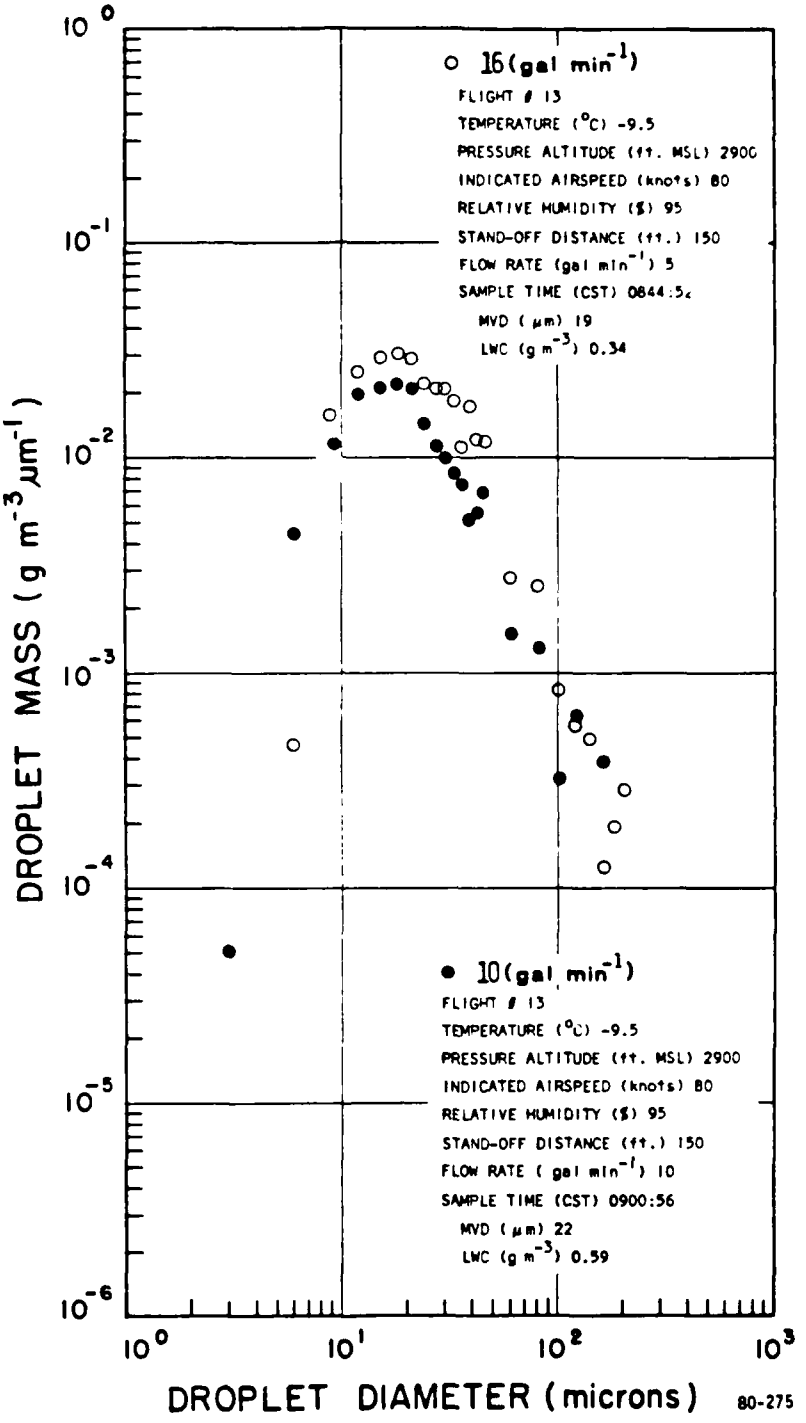


Figure 4-13 CHANGE IN DROPLET MASS DISTRIBUTION BETWEEN WATER FLOWS OF 10 AND 16 gal min^{-1}

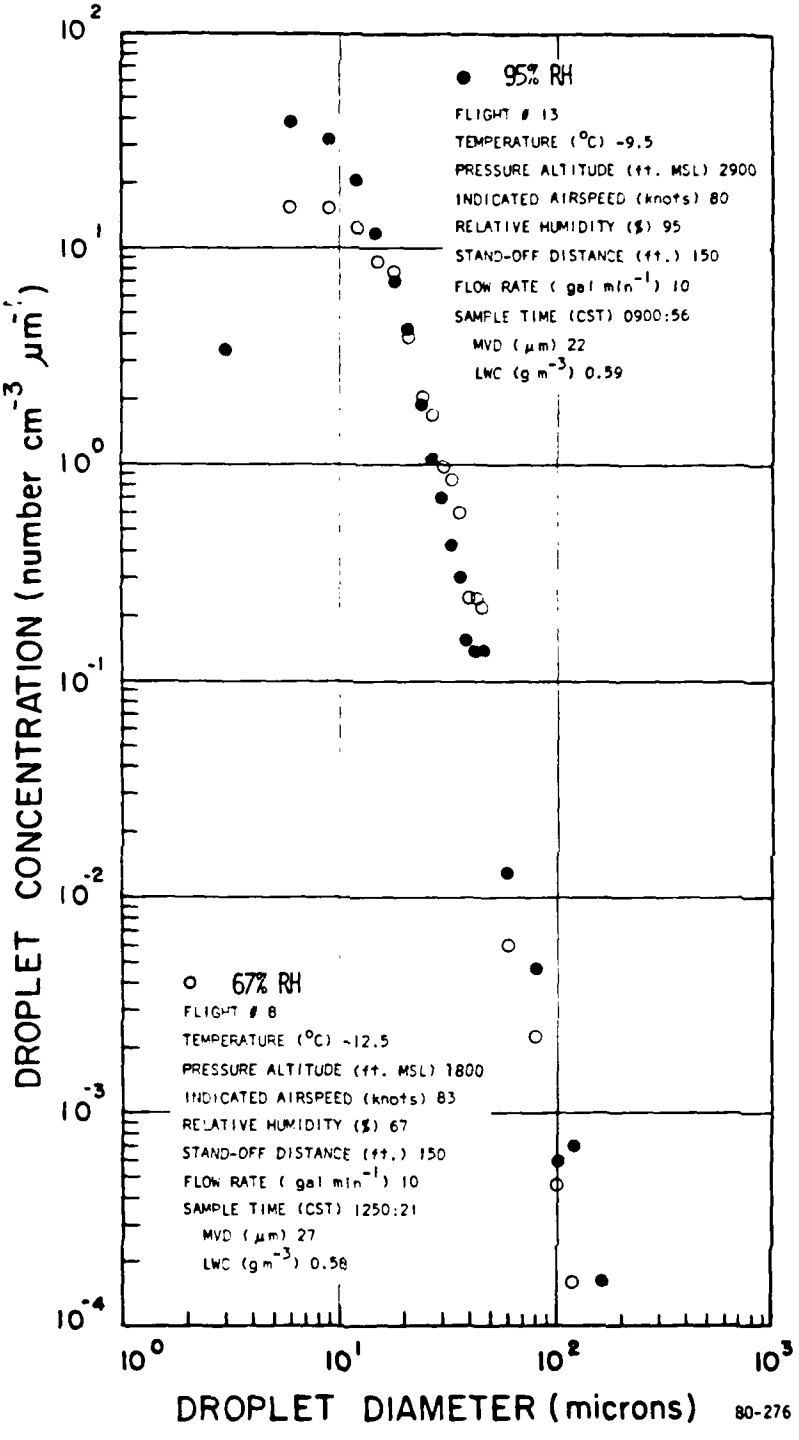


Figure 4-14 HUMIDITY EFFECT ON DROPLET CONCENTRATION DISTRIBUTION

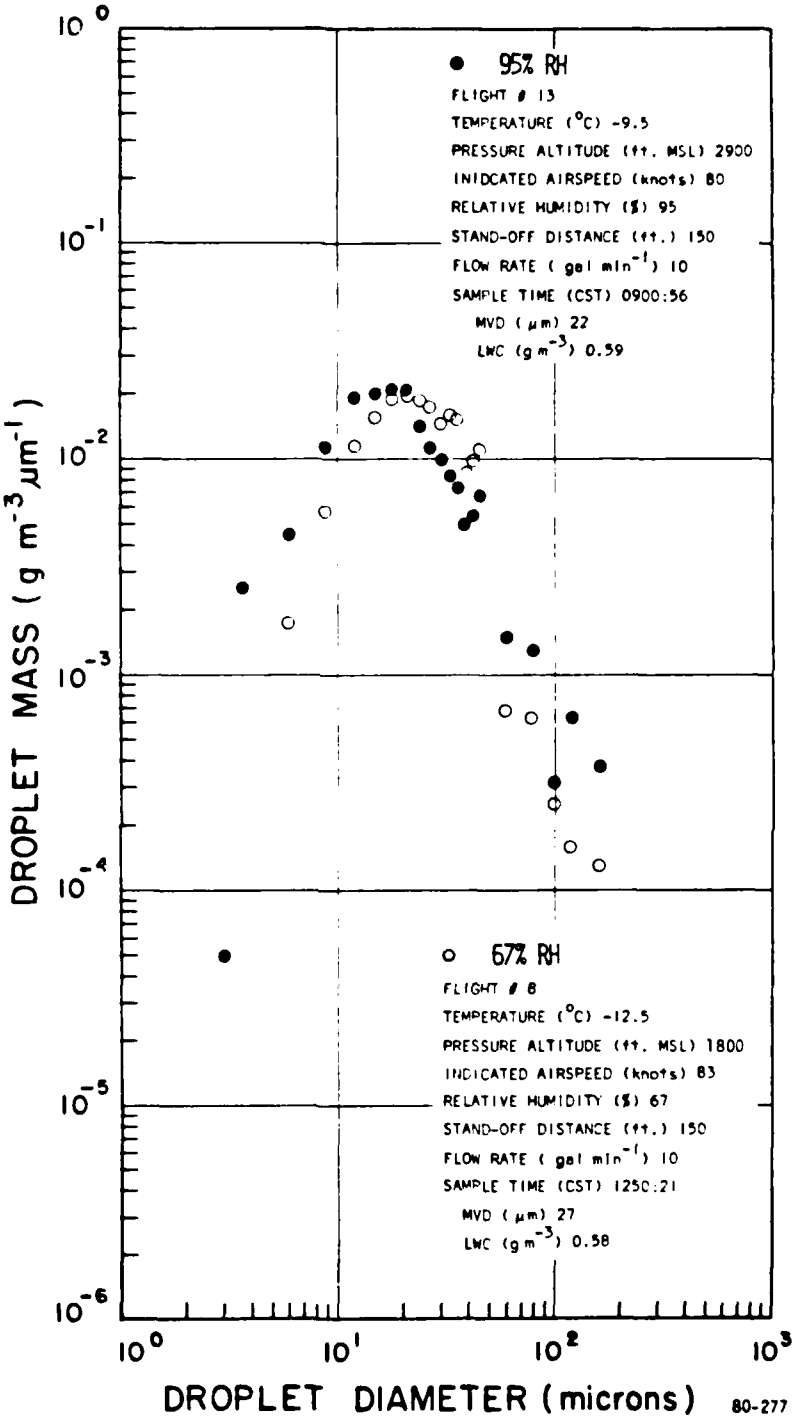


Figure 4-15 HUMIDITY EFFECT ON DROPLET MASS DISTRIBUTION

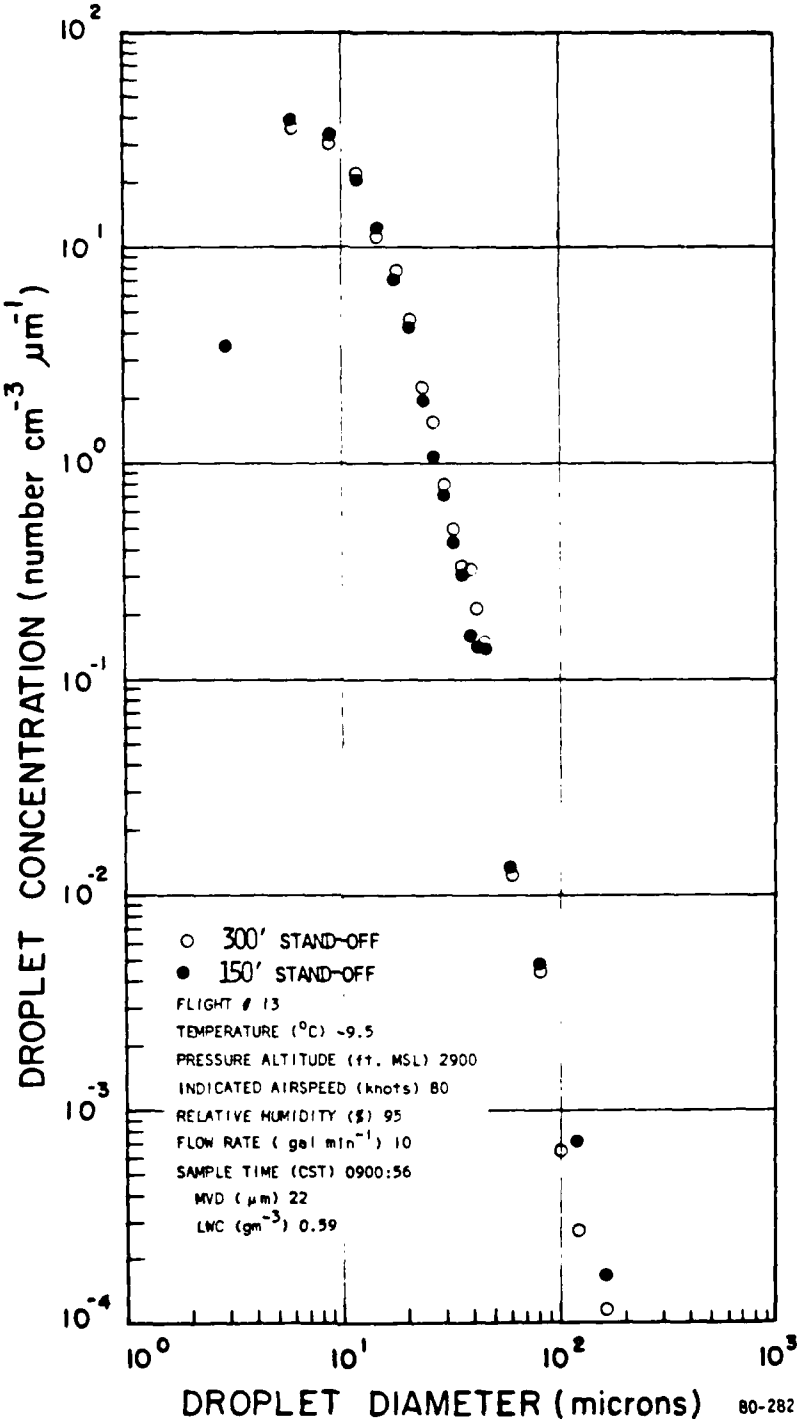


Figure 4-16 RANGE EFFECT ON DROPLET CONCENTRATION DISTRIBUTION

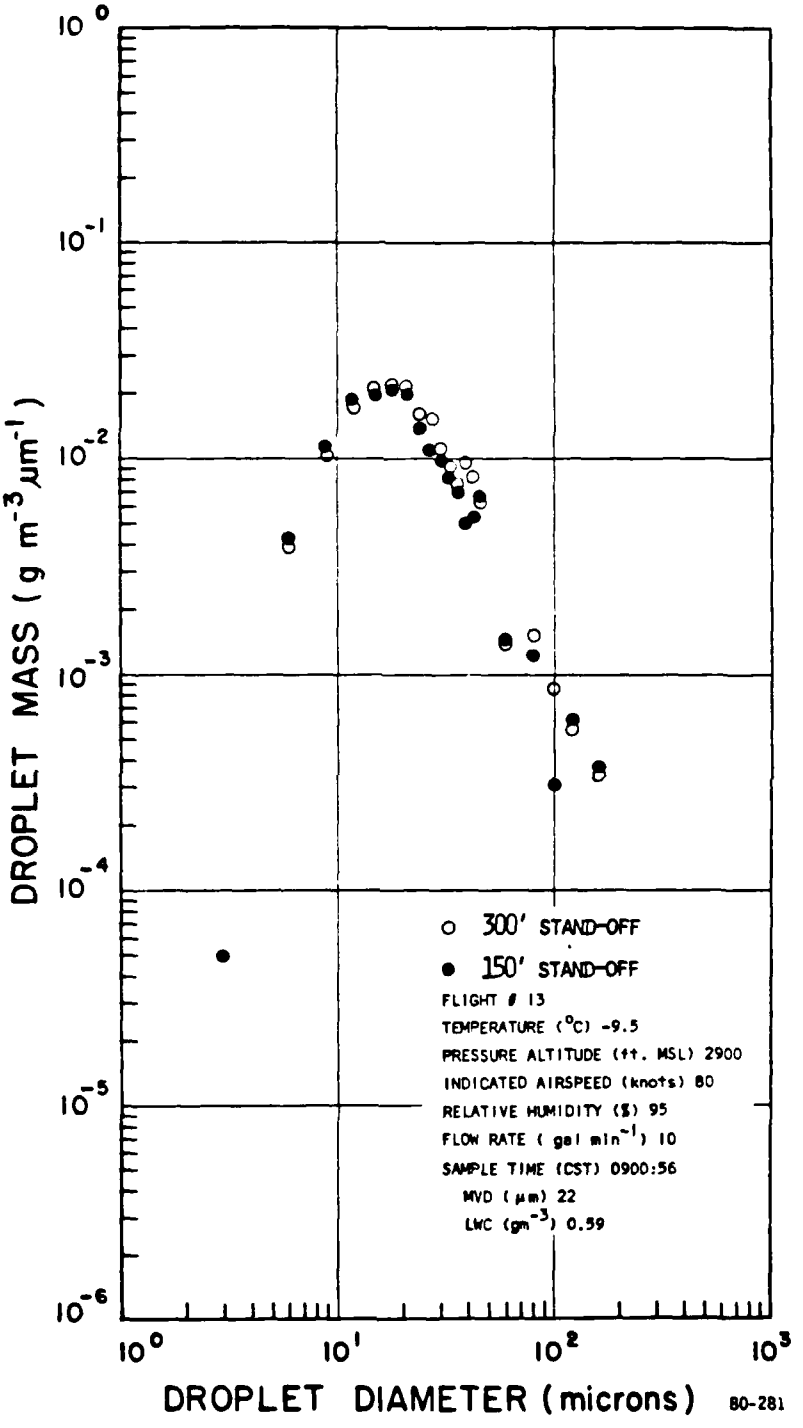


Figure 4-17 RANGE EFFECT ON DROPLET MASS DISTRIBUTION

Comparison with 1978-1979 HISS and Natural Clouds

Figures 4-18 and 4-19 show the marked improvement of the current HISS over the past HISS configuration. Note the greatly increased number of droplets in sizes less than 30 μm. In fact, the increase in number is about two orders of magnitude. Also greatly reduced in number are droplets larger than 45 μm in diameter. A one order of magnitude decrease in number can be observed in those sizes. Both of the above changes result in a significant shift of mass toward smaller droplet sizes. This results in the decrease in MVD from about 250 μm to approximately 30 μm.

Natural

While the current HISS is much improved over previous versions when compared to a natural cloud, two important differences can be observed. Figures 4-20 and 4-21 compare the HISS to a natural cloud observed in the 1980 field program. First, there is still considerable mass at sizes greater than 45 μm which is absent in a natural cloud. Second, a natural cloud has both its mass and number concentration peaked steeply about the MVD. While the HISS cloud peaks near the MVD, the peak is much broader indicating the presence of both larger and smaller droplets. Figures 4-22 and 4-23 show the droplet concentration and mass distributions for 3 natural clouds sampled during the 1979-80 HISS program.

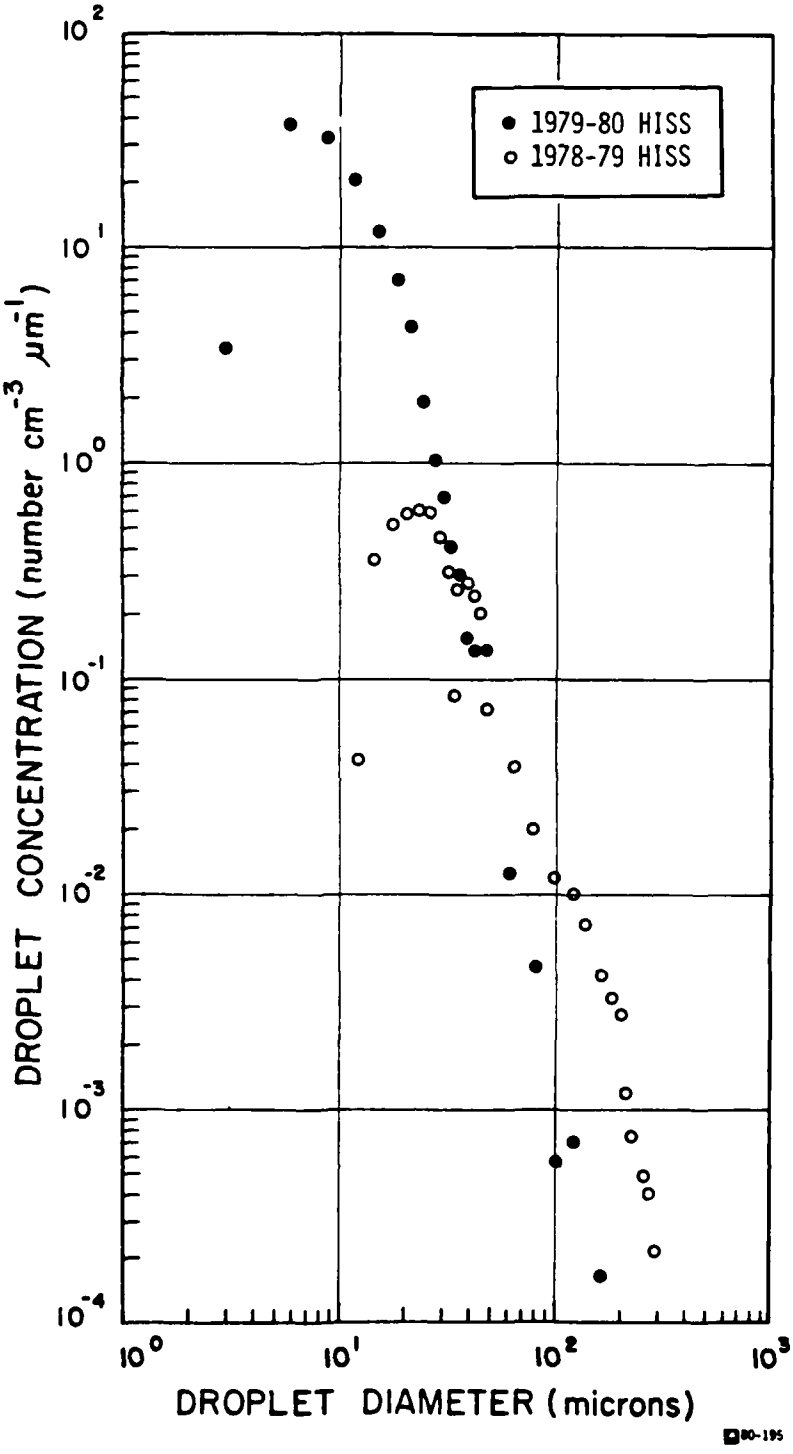


Figure 4-18 COMPARISON OF DROPLET CONCENTRATION BETWEEN THE 1979 AND THE 1980 HISS

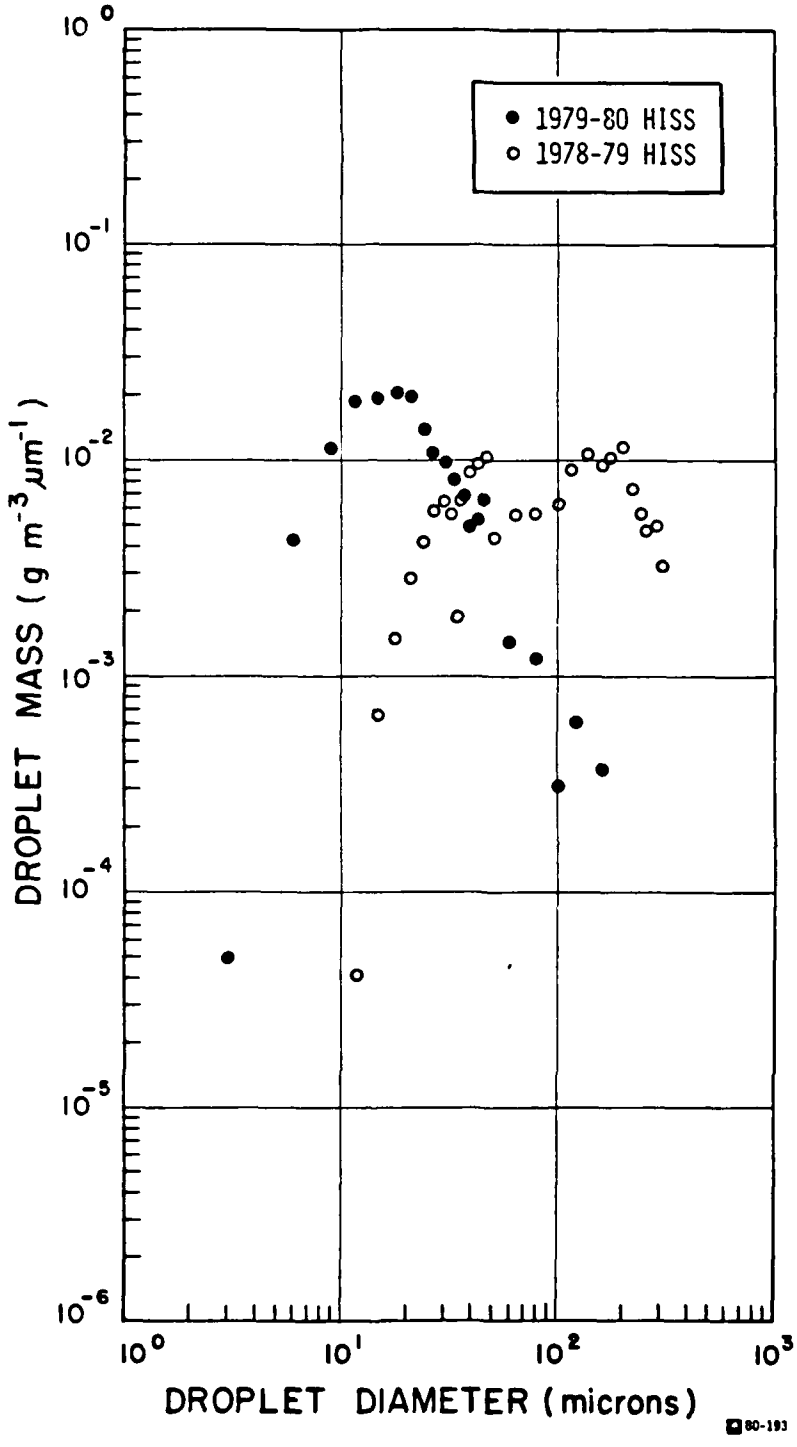


Figure 4-19 COMPARISON OF DROPLET MASS BETWEEN THE 1979 AND THE 1980 HISS

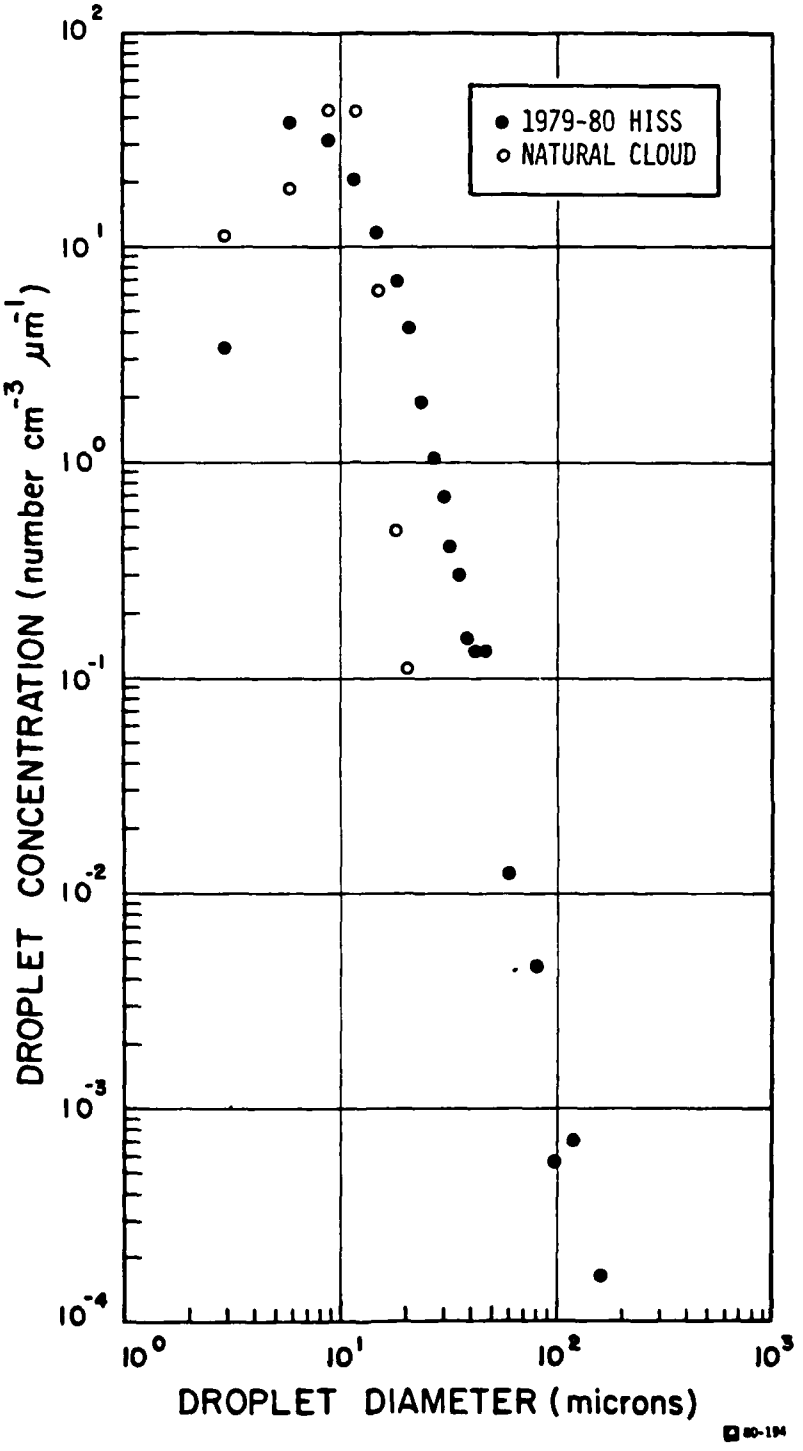


Figure 4-20 COMPARISON OF DROPLET CONCENTRATION BETWEEN THE 1980 HISS AND A NATURAL CLOUD

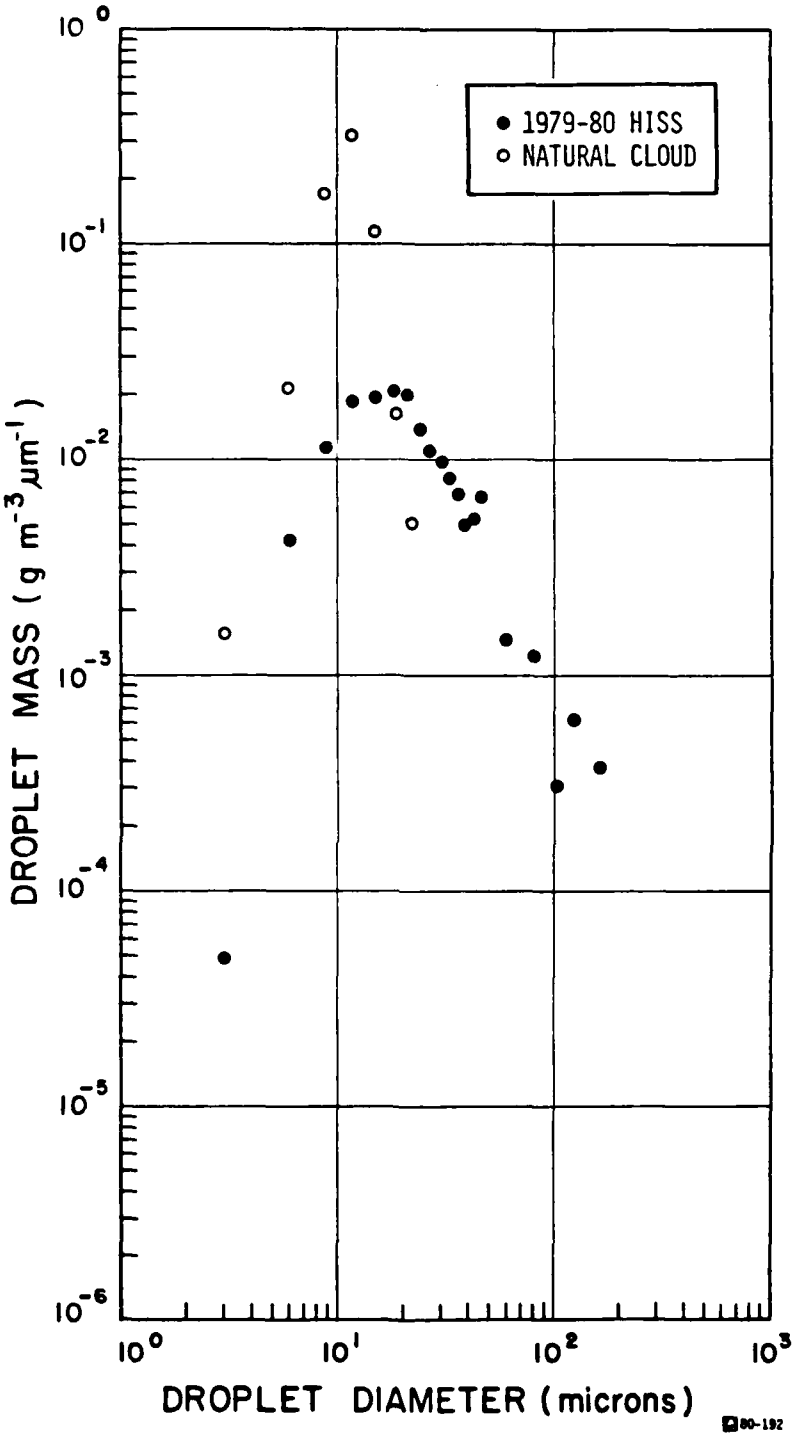


Figure 4-21 COMPARISON OF DROPLET MASS BETWEEN THE 1980 HISS AND A NATURAL CLOUD

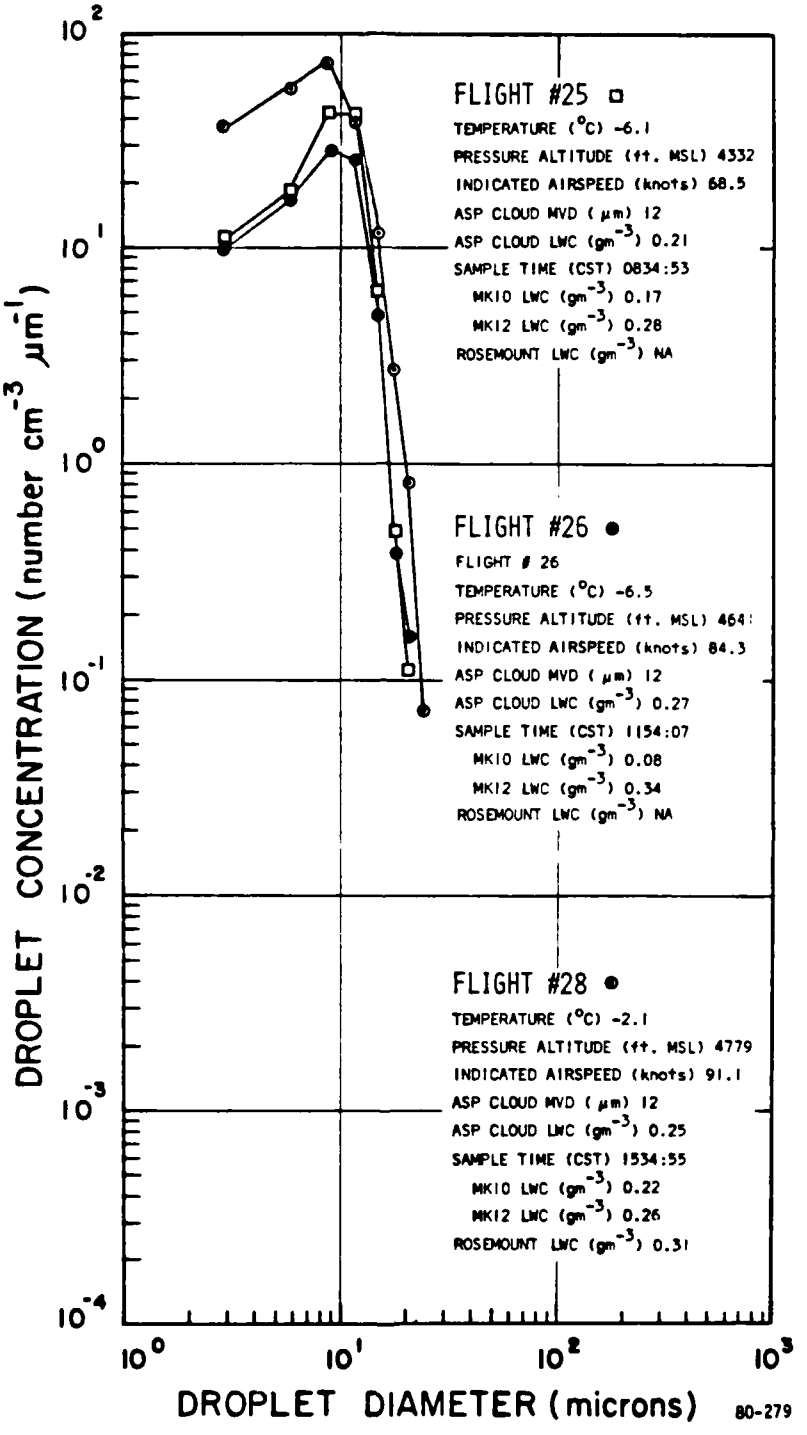


Figure 4-22 DROPLET CONCENTRATIONS FOR THREE NATURAL CLOUDS

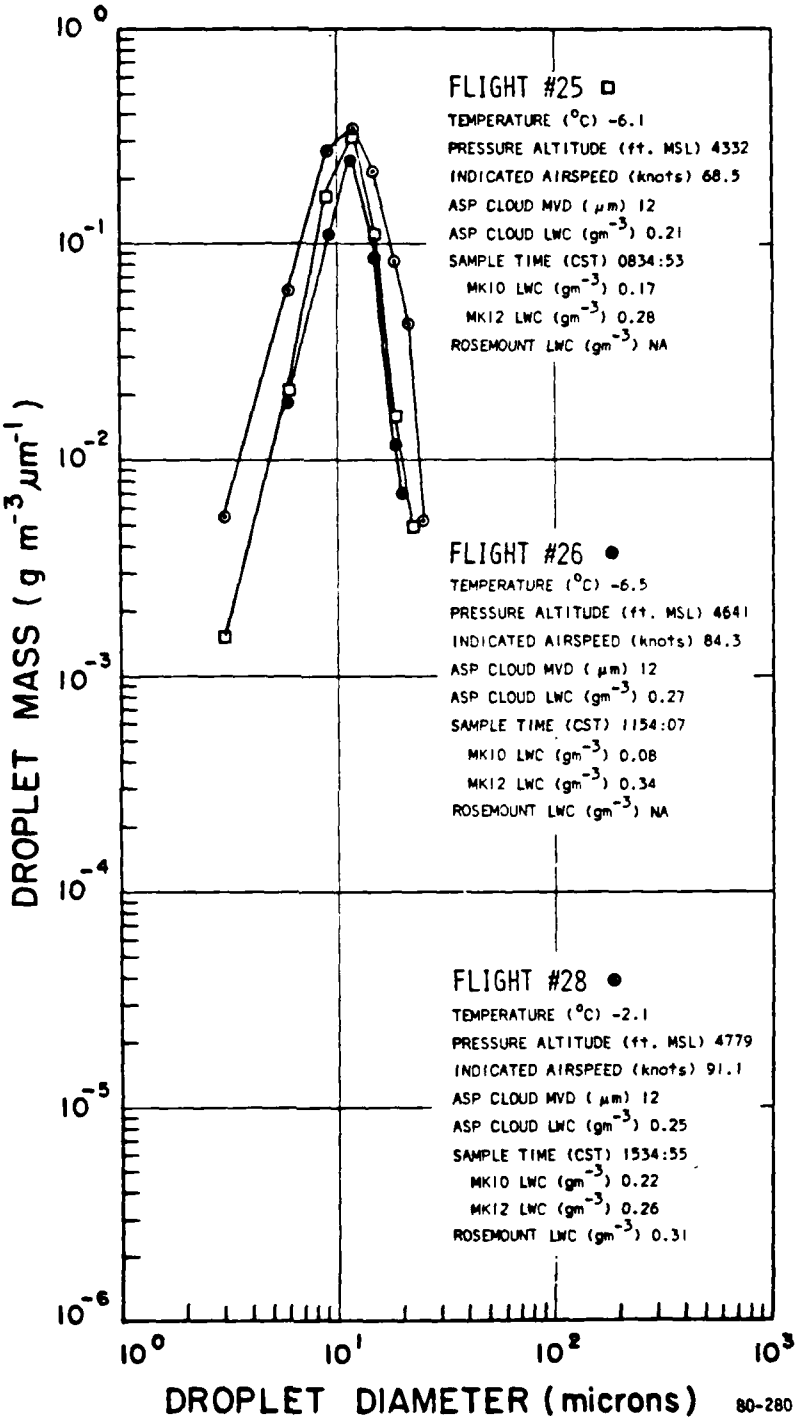


Figure 4-23 DROPLET MASS FOR THREE NATURAL CLOUDS

APPENDIX A

HISS FLIGHTS

Flight #8
Flight #9
Flight #10
Flight #12
Flight #13

KEY TO SPECTRAL REPORT FORMAT

Term	Unit	Comment
Date	--	Month/Day/Year
Time		Hours, Minutes, Seconds
Diameter	microns (μm)	Midpoint of each channel
Number (M-3)	# per m^3	Normalized droplet count in that channel
Number (M-3U-1)	# per m^3 per micron (μm)	Normalized droplet count per channel divided by channel width (3 μm for ASSP, 20 μm for CPS, and 140 μm for PPS)
Mass (GM-3)	grams per m^3	LWC in each channel
Mass (GM-3U-1)	grams per m^3 per micron (μm)	LWC in each channel divided by channel width
Percent	%	Percent of total LWC in each channel
Cum Percent	%	Cumulative percent of total LWC in each channel (50% point is MVD)
ASSP LWC (GM-3)	grams per m^3	LWC in ASSP
CPS LWC (GM-3)	grams per m^3	LWC in CPS
ASSP Counts (CC-1)	# per cc	Total number of normalized counts in ASSP
CPS Counts (LIT-1)	# per liter	Total number of normalized counts in CPS

The spectral data are for stable, selected one-second points. These data points were selected as representative of the average data for the HISS conditions.

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 318

2/ 2/80
TAPE # 108
FLIGHT # 8
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 30. GPM
SAMPLE TIME 1229:29

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.000E+00	.000E+00	.000E+00	.000E+00	0.	0.
6	.592E+08	.194E+08	.659E-02	.220E-02	0.	0.
9	.543E+08	.181E+08	.207E-01	.690E-02	2.	2.
12	.452E+08	.151E+08	.409E-01	.136E-01	3.	5.
15	.320E+08	.109E+08	.577E-01	.192E-01	4.	9.
18	.259E+08	.862E+07	.790E-01	.263E-01	6.	15.
21	.191E+08	.638E+07	.928E-01	.309E-01	7.	22.
24	.130E+08	.434E+07	.943E-01	.314E-01	7.	29.
27	.990E+07	.330E+07	.102E+00	.340E-01	8.	36.
30	.657E+07	.219E+07	.928E-01	.309E-01	7.	43.
33	.524E+07	.175E+07	.990E-01	.330E-01	7.	51.
36	.346E+07	.115E+07	.846E-01	.282E-01	6.	57.
39	.330E+07	.110E+07	.102E+00	.342E-01	8.	64.
42	.248E+07	.828E+06	.963E-01	.321E-01	7.	71.
45	.206E+07	.686E+06	.982E-01	.327E-01	7.	79.
60	.868E+06	.434E+05	.981E-01	.491E-02	7.	86.
80	.360E+06	.180E+05	.966E-01	.483E-02	7.	93.
100	.675E+05	.337E+04	.353E-01	.177E-02	3.	96.
120	.337E+05	.168E+04	.305E-01	.152E-02	2.	98.
140	.111E+05	.553E+03	.159E-01	.795E-03	1.	99.
160	.474E+04	.237E+03	.102E-01	.508E-03	1.	100.
180	.127E+04	.635E+02	.388E-02	.194E-03	0.	100.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= 1.07 CPS LWC(GM-3)= .369

ASP COUNTS(CC-1)= 281. CPS COUNTS(LIT-1)= 6.

1.36 GRAMS PER CUBIC METER @ 34. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUN-IM 316

2/ 2/80
TAPE # 10A
FLIGHT # 8
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 20. GPM
SAMPLE TIME 1237:47

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.000E+00	.000E+00	.000E+00	.000E+00	0.	0.
6	.781E+08	.260E+08	.884E-02	.295E-02	1.	1.
9	.819E+08	.283E+08	.324E-01	.108E-01	3.	3.
12	.675E+08	.225E+08	.610E-01	.203E-01	5.	9.
15	.451E+08	.150E+08	.798E-01	.266E-01	7.	15.
18	.326E+08	.109E+08	.996E-01	.332E-01	8.	24.
21	.227E+08	.757E+07	.110E+00	.367E-01	9.	33.
24	.144E+08	.481E+07	.105E+00	.348E-01	9.	42.
27	.947E+07	.316E+07	.976E-01	.325E-01	8.	50.
30	.650E+07	.217E+07	.919E-01	.306E-01	8.	58.
33	.418E+07	.139E+07	.787E-01	.262E-01	7.	65.
36	.336E+07	.112E+07	.822E-01	.274E-01	7.	71.
39	.274E+07	.915E+06	.852E-01	.284E-01	7.	79.
42	.209E+07	.697E+06	.811E-01	.270E-01	7.	86.
45	.167E+07	.555E+06	.795E-01	.265E-01	7.	92.
60	.434E+06	.217E+05	.491E-01	.245E-02	4.	96.
80	.107E+06	.535E+04	.287E-01	.143E-02	2.	99.
100	.121E+05	.603E+03	.631E-02	.315E-03	1.	99.
120	.177E+04	.886E+02	.160E-02	.802E-04	0.	99.
140	.277E+04	.138E+03	.398E-02	.199E-03	0.	100.
160	.119E+04	.593E+02	.254E-02	.127E-03	0.	100.
180	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= 1.09 CPS LWC(GM-3)= .128

ASP COUNTS(CC-1)= 375. CPS COUNTS(LIT-1)= 3.

1.19 GRAMS PER CUBIC METER @ 28. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 318

2/ 2/80
TAPE # 108
FLIGHT # 8
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 15. GPM
SAMPLE TIME 1243:58

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.000E+00	.000E+00	.000E+00	.000E+00	0.	0.
6	.702E+08	.234E+08	.794E-02	.265E-02	1.	1.
9	.760E+08	.253E+08	.290E-01	.967E-02	3.	4.
12	.647E+08	.216E+08	.586E-01	.195E-01	7.	11.
15	.435E+08	.145E+08	.770E-01	.257E-01	9.	19.
18	.300E+08	.100E+08	.917E-01	.306E-01	10.	30.
21	.191E+08	.638E+07	.928E-01	.309E-01	10.	40.
24	.119E+08	.395E+07	.858E-01	.286E-01	10.	50.
27	.738E+07	.246E+07	.761E-01	.254E-01	9.	58.
30	.464E+07	.155E+07	.656E-01	.219E-01	7.	66.
33	.301E+07	.100E+07	.566E-01	.189E-01	6.	72.
36	.261E+07	.871E+06	.638E-01	.213E-01	7.	79.
39	.235E+07	.784E+06	.731E-01	.244E-01	8.	87.
42	.144E+07	.479E+06	.558E-01	.186E-01	6.	94.
45	.915E+06	.305E+06	.436E-01	.145E-01	5.	98.
60	.743E+05	.392E+04	.886E-02	.443E-03	1.	99.
80	.178E+05	.892E+03	.478E-02	.239E-03	1.	100.
100	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
120	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
140	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
160	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
180	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .877 CPS LWC(GM-3)= .031

ASP COUNTS(CC-1)= 338. CPS COUNTS(LIT-1)= 1.

.89 GRAMS PER CUBIC METER @ 26. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 318

2/ 2/80
TAPE # 108
FLIGHT # A
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 10. GPM
SAMPLE TIME 1250:21

DIAMETER	NUMBER(M=3)	NUMBER(M=3U=1)	MASS(GM=3)	MASS(GM=3U=1)	PERCENT	CUM PERCENT
3	.000E+00	.000E+00	.000E+00	.000E+00	0.	0.
6	.469E+08	.156E+08	.530E-02	.177E-02	1.	1.
9	.451E+08	.150E+08	.172E-01	.573E-02	3.	4.
12	.369E+08	.123E+08	.333E-01	.111E-01	6.	10.
15	.260E+08	.866E+07	.459E-01	.153E-01	8.	17.
18	.186E+08	.621E+07	.569E-01	.190E-01	10.	27.
21	.120E+08	.400E+07	.581E-01	.194E-01	10.	37.
24	.761E+07	.254E+07	.551E-01	.184E-01	9.	47.
27	.516E+07	.172E+07	.532E-01	.177E-01	9.	56.
30	.301E+07	.100E+07	.425E-01	.142E-01	7.	63.
33	.258E+07	.860E+06	.486E-01	.162E-01	8.	71.
36	.186E+07	.621E+06	.455E-01	.152E-01	8.	79.
39	.751E+06	.250E+06	.233E-01	.778E-02	4.	83.
42	.751E+06	.250E+06	.291E-01	.972E-02	5.	88.
45	.660E+06	.229E+06	.327E-01	.109E-01	6.	94.
60	.121E+06	.403E+04	.136E-01	.681E-03	2.	96.
80	.464E+05	.232E+04	.124E-01	.622E-03	2.	98.
100	.964E+04	.482E+03	.505E-02	.252E-03	1.	99.
120	.354E+04	.177E+03	.321E-02	.160E-03	1.	100.
140	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
160	.119E+04	.593E+02	.254E-02	.127E-03	0.	100.
180	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM=3)= .547 CPS LWC(GM=3)= .056

ASP COUNTS(CC=1)= 208. CPS COUNTS(L11=1)= 2.

.58 GRAMS PER CUBIC METER @ 27. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 318

2/ 2/80
TAPE # 108
FLIGHT # 8
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 40. GPM
SAMPLE TIME 13 4: 0

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.000E+00	.000E+00	.000E+00	.000E+00	0.	0.
6	.455E+08	.152E+08	.515E-02	.172E-02	0.	0.
9	.397E+08	.132E+08	.151E-01	.505E-02	1.	2.
12	.284E+08	.945E+07	.257E-01	.855E-02	2.	4.
15	.175E+08	.583E+07	.309E-01	.103E-01	2.	6.
18	.112E+08	.374E+07	.342E-01	.114E-01	3.	9.
21	.732E+07	.244E+07	.355E-01	.118E-01	3.	11.
24	.385E+07	.128E+07	.279E-01	.930E-02	2.	14.
27	.343E+07	.114E+07	.354E-01	.118E-01	3.	16.
30	.219E+07	.730E+06	.309E-01	.103E-01	2.	19.
33	.170E+07	.566E+06	.320E-01	.107E-01	2.	21.
36	.163E+07	.544E+06	.399E-01	.133E-01	3.	24.
39	.131E+07	.436E+06	.406E-01	.135E-01	3.	27.
42	.127E+07	.425E+06	.494E-01	.165E-01	4.	31.
45	.719E+06	.240E+06	.343E-01	.114E-01	3.	34.
60	.155E+07	.777E+05	.176E+00	.879E-02	14.	48.
80	.742E+06	.371E+05	.199E+00	.995E-02	15.	63.
100	.255E+06	.128E+05	.134E+00	.669E-02	10.	74.
120	.922E+05	.461E+04	.834E-01	.417E-02	6.	80.
140	.512E+05	.256E+04	.735E-01	.368E-02	6.	86.
160	.237E+05	.119E+04	.508E-01	.254E-02	4.	90.
180	.381E+04	.191E+03	.116E-01	.582E-03	1.	91.
200	.410E+04	.205E+03	.172E-01	.859E-03	1.	92.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	92.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	92.
260	.533E+04	.267E+03	.491E-01	.245E-02	4.	96.
280	.198E+04	.988E+02	.227E-01	.114E-02	2.	98.
300	.222E+04	.111E+03	.314E-01	.157E-02	2.	100.

ASP LWC(GM-3)= .437 CPS LWC(GM-3)= .962

ASP COUNTS(CC-1)= 166. CPS COUNTS(LIT-1)= 10.

1.29 GRAMS PER CUBIC METER @ 73. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUN-1H 318

2/ 2/80
TAPE # 108
FLIGHT # 8
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 35. GPM
SAMPLE TIME 1310:15

DIAMETER	NUMBER(M=3)	NUMBER(M=3D=1)	MASS(GM=3)	MASS(GM=3D=1)	PERCENT	CUM PERCENT
3	.000E+00	.000E+00	.000E+00	.000E+00	0.	0.
6	.129E+06	.401E+07	.136E-02	.453E-03	0.	0.
9	.660E+07	.220E+07	.252E-02	.840E-03	0.	1.
12	.350E+07	.117E+07	.316E-02	.105E-02	1.	1.
15	.246E+07	.828E+06	.439E-02	.146E-02	1.	2.
18	.131E+07	.436E+06	.399E-02	.133E-02	1.	2.
21	.111E+07	.370E+06	.539E-02	.180E-02	1.	3.
24	.108E+07	.359E+06	.780E-02	.260E-02	1.	5.
27	.719E+06	.240E+06	.741E-02	.247E-02	1.	6.
30	.915E+06	.305E+06	.129E-01	.431E-02	2.	8.
33	.784E+06	.261E+06	.148E-01	.492E-02	2.	10.
36	.490E+06	.163E+06	.120E-01	.399E-02	2.	12.
39	.392E+06	.131E+06	.122E-01	.406E-02	2.	14.
42	.457E+06	.152E+06	.177E-01	.591E-02	3.	17.
45	.653E+06	.218E+06	.312E-01	.104E-01	5.	22.
60	.106E+07	.530E+05	.120E+00	.600E-02	19.	41.
80	.464E+06	.232E+05	.124E+00	.622E-02	20.	61.
100	.169E+06	.844E+04	.883E-01	.442E-02	14.	75.
120	.425E+05	.213E+04	.385E-01	.192E-02	6.	81.
140	.249E+05	.125E+04	.358E-01	.179E-02	6.	87.
160	.830E+04	.415E+03	.178E-01	.890E-03	3.	90.
180	.254E+04	.127E+03	.776E-02	.388E-03	1.	91.
200	.274E+04	.137E+03	.115E-01	.573E-03	2.	93.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	93.
240	.162E+04	.808E+02	.117E-01	.585E-03	2.	95.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	95.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	95.
300	.222E+04	.111E+03	.314E-01	.157E-02	5.	100.

ASP LWC(GM=3)= .137 CPS LWC(GM=3)= .573

ASP COUNTS(CC-1)= 35. CPS COUNTS(LII-1)= 7.

.62 GRAMS PER CUBIC METER @ 79. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUN-1M 318

2/ 2/80
TAPE # 106
FLIGHT # 8
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 25. GPM
SAMPLE TIME 1316:52

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.000E+00	.000E+00	.000E+00	.000E+00	0.	0.
6	.521E+05	.174E+08	.590E-02	.197E-02	1.	1.
9	.524E+05	.175E+06	.200E-01	.667E-02	2.	2.
12	.452E+05	.151E+08	.409E-01	.136E-01	4.	6.
15	.347E+05	.116E+08	.613E-01	.204E-01	6.	12.
18	.240E+05	.799E+07	.732E-01	.244E-01	7.	19.
21	.171E+05	.568E+07	.827E-01	.276E-01	8.	26.
24	.103E+05	.343E+07	.745E-01	.248E-01	7.	33.
27	.827E+07	.273E+07	.845E-01	.282E-01	8.	41.
30	.601E+07	.200E+07	.850E-01	.283E-01	8.	49.
33	.483E+07	.161E+07	.910E-01	.303E-01	8.	57.
36	.307E+07	.102E+07	.750E-01	.250E-01	7.	64.
39	.310E+07	.103E+07	.964E-01	.321E-01	9.	73.
42	.176E+07	.588E+06	.684E-01	.228E-01	6.	80.
45	.134E+07	.446E+06	.639E-01	.213E-01	6.	85.
60	.494E+06	.247E+05	.559E-01	.279E-02	5.	91.
80	.200E+06	.999E+04	.536E-01	.268E-02	5.	96.
100	.410E+05	.205E+04	.215E-01	.107E-02	2.	98.
120	.709E+04	.354E+03	.641E-02	.321E-03	1.	99.
140	.553E+04	.277E+03	.795E-02	.398E-03	1.	99.
160	.000E+00	.000E+00	.000E+00	.000E+00	0.	99.
180	.000E+00	.000E+00	.000E+00	.000E+00	0.	99.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	99.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	99.
240	.162E+04	.808E+02	.117E-01	.585E-03	1.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .923 CPS LWC(GM-3)= .197

ASP COUNTS(CC-1)= 264. CPS COUNTS(LIT-1)= 4.

1.08 GRAMS PER CUBIC METER @ 32. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 318

27 4/80
TAPE # 109
FLIGHT # 9
STAND-OFF DISTANCE 200 FEET
WATER FLOW RATE OF 20. GPM
SAMPLE TIME 11 6:55

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.000E+00	.000E+00	.000E+00	.000E+00	0.	0.
6	.748E+08	.249E+08	.846E-02	.282E-02	1.	1.
9	.572E+08	.191E+08	.218E-01	.728E-02	2.	3.
12	.401E+08	.134E+08	.363E-01	.121E-01	3.	6.
15	.230E+08	.768E+07	.407E-01	.136E-01	4.	9.
18	.156E+08	.518E+07	.475E-01	.158E-01	4.	13.
21	.990E+07	.330E+07	.480E-01	.160E-01	4.	18.
24	.585E+07	.195E+07	.423E-01	.141E-01	4.	21.
27	.434E+07	.145E+07	.448E-01	.149E-01	4.	25.
30	.310E+07	.103E+07	.439E-01	.146E-01	4.	29.
33	.245E+07	.817E+06	.461E-01	.154E-01	4.	33.
36	.222E+07	.740E+06	.543E-01	.181E-01	5.	38.
39	.157E+07	.523E+06	.487E-01	.162E-01	4.	42.
42	.140E+07	.468E+06	.545E-01	.182E-01	5.	47.
45	.980E+06	.327E+06	.468E-01	.156E-01	4.	51.
60	.838E+06	.419E+05	.947E-01	.474E-02	8.	59.
80	.407E+06	.203E+05	.109E+00	.545E-02	9.	68.
100	.202E+06	.101E+05	.106E+00	.530E-02	9.	78.
120	.691E+05	.346E+04	.625E-01	.313E-02	5.	83.
140	.360E+05	.180E+04	.517E-01	.258E-02	4.	88.
160	.213E+05	.107E+04	.458E-01	.229E-02	4.	92.
180	.114E+05	.572E+03	.349E-01	.175E-02	3.	95.
200	.821E+04	.410E+03	.344E-01	.172E-02	3.	98.
220	.296E+04	.148E+03	.165E-01	.826E-03	1.	99.
240	.162E+04	.808E+02	.117E-01	.585E-03	1.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .584 CPS LWC(GM-3)= .628

ASP COUNTS(CC-1)= 243. CPS COUNTS(LIT-1)= 5.

1.15 GRAMS PER CUBIC METER @ 46. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 318

2/ 4/80
TAPE # 109
FLIGHT # 9
STAND-OFF DISTANCE 300 FEET
WATER FLOW RATE OF 20. GPM
SAMPLE TIME 11 9: 0

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUV PERCENT
3	.000E+00	.000E+00	.000E+00	.000E+00	0.	0.
6	.659E+08	.213E+08	.723E-02	.241E-02	1.	1.
9	.511E+08	.170E+08	.195E-01	.651E-02	1.	2.
12	.363E+08	.121E+08	.329E-01	.110E-01	2.	4.
15	.226E+08	.754E+07	.399E-01	.133E-01	3.	7.
18	.157E+08	.525E+07	.481E-01	.160E-01	4.	11.
21	.103E+08	.344E+07	.501E-01	.167E-01	4.	15.
24	.683E+07	.228E+07	.494E-01	.165E-01	4.	19.
27	.483E+07	.161E+07	.498E-01	.166E-01	4.	22.
30	.366E+07	.122E+07	.517E-01	.172E-01	4.	26.
33	.304E+07	.101E+07	.572E-01	.191E-01	4.	31.
36	.216E+07	.719E+06	.527E-01	.176E-01	4.	34.
39	.121E+07	.403E+06	.375E-01	.125E-01	3.	37.
42	.147E+07	.490E+06	.570E-01	.190E-01	4.	42.
45	.118E+07	.392E+06	.561E-01	.187E-01	4.	46.
60	.663E+06	.331E+05	.750E-01	.375E-02	6.	51.
80	.446E+06	.223E+05	.120E+00	.598E-02	9.	60.
100	.222E+06	.111E+05	.116E+00	.581E-02	9.	69.
120	.117E+06	.585E+04	.106E+00	.529E-02	8.	77.
140	.512E+05	.256E+04	.735E-01	.368E-02	6.	83.
160	.344E+05	.172E+04	.737E-01	.369E-02	6.	88.
180	.216E+05	.108E+04	.659E-01	.330E-02	5.	93.
200	.957E+04	.479E+03	.401E-01	.201E-02	3.	96.
220	.296E+04	.148E+03	.165E-01	.826E-03	1.	97.
240	.162E+04	.808E+02	.117E-01	.585E-03	1.	98.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	98.
280	.198E+04	.988E+02	.227E-01	.114E-02	2.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .609 CPS LWC(GM-3)= .777

ASP COUNTS(CC-1)= 224. CPS COUNTS(LIT-1)= 5.

1.33 GRAMS PER CUBIC METER @ 65. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 318

2/ 4/80
TAPE # 109
FLIGHT # 9
STAND-OFF DISTANCE 200 FEET
WATER FLOW RATE OF 15. GPM
SAMPLE TIME 1112:50

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.302E+08	.101E+08	.427E-03	.142E-03	0.	0.
6	.149E+09	.497E+08	.169E-01	.562E-02	2.	2.
9	.107E+09	.356E+08	.408E-01	.136E-01	5.	7.
12	.643E+08	.214E+08	.581E-01	.194E-01	7.	14.
15	.374E+08	.125E+08	.662E-01	.221E-01	8.	22.
18	.231E+08	.769E+07	.704E-01	.235E-01	8.	30.
21	.167E+08	.555E+07	.808E-01	.269E-01	10.	40.
24	.827E+07	.276E+07	.598E-01	.199E-01	7.	47.
27	.506E+07	.169E+07	.522E-01	.174E-01	6.	53.
30	.350E+07	.117E+07	.494E-01	.165E-01	6.	59.
33	.235E+07	.784E+06	.443E-01	.148E-01	5.	64.
36	.176E+07	.588E+06	.431E-01	.144E-01	5.	70.
39	.915E+06	.305E+06	.284E-01	.947E-02	3.	73.
42	.118E+07	.392E+06	.456E-01	.152E-01	5.	78.
45	.751E+06	.250E+06	.359E-01	.120E-01	4.	83.
60	.476E+06	.238E+05	.538E-01	.269E-02	6.	89.
80	.132E+06	.660E+04	.354E-01	.177E-02	4.	93.
100	.362E+05	.181E+04	.189E-01	.946E-03	2.	96.
120	.142E+05	.709E+03	.128E-01	.641E-03	2.	97.
140	.553E+04	.277E+03	.795E-02	.398E-03	1.	98.
160	.119E+04	.593E+02	.254E-02	.127E-03	0.	98.
180	.254E+04	.127E+03	.776E-02	.388E-03	1.	99.
200	.137E+04	.684E+02	.573E-02	.286E-03	1.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .692 CPS LWC(GM-3)= .206

ASP COUNTS(CC-1)= 451. CPS COUNTS(LIT-1)= 4.

.84 GRAMS PER CUBIC METER @ 27. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 318

2/ 4/80
TAPE # 109
FLIGHT # 9
STAND-OFF DISTANCE 300 FEET
WATER FLOW RATE OF 15. GPM
SAMPLE TIME 1115:35

DIAMETER	NUMBER(M=3)	NUMBER(M=3)(I=1)	MASS(GM=3)	MASS(GM=3)(I=1)	PERCENT	CUM PERCENT
3	.500E+07	.167E+07	.707E-04	.236E-04	0.	0.
6	.124E+09	.413E+08	.140E-01	.468E-02	2.	2.
9	.100E+09	.335E+08	.384E-01	.128E-01	4.	6.
12	.657E+08	.219E+08	.595E-01	.198E-01	7.	12.
15	.399E+08	.133E+08	.705E-01	.235E-01	8.	20.
18	.257E+08	.857E+07	.785E-01	.262E-01	9.	29.
21	.171E+08	.570E+07	.828E-01	.276E-01	9.	38.
24	.101E+08	.336E+07	.731E-01	.244E-01	8.	46.
27	.617E+07	.206E+07	.636E-01	.212E-01	7.	53.
30	.363E+07	.121E+07	.513E-01	.171E-01	6.	59.
33	.242E+07	.806E+06	.455E-01	.152E-01	5.	64.
36	.167E+07	.555E+06	.407E-01	.136E-01	5.	68.
39	.114E+07	.381E+06	.355E-01	.118E-01	4.	72.
42	.980E+06	.327E+06	.380E-01	.127E-01	4.	77.
45	.882E+06	.294E+06	.421E-01	.140E-01	5.	81.
60	.380E+06	.190E+05	.429E-01	.215E-02	5.	86.
80	.182E+06	.910E+04	.488E-01	.244E-02	5.	91.
100	.386E+05	.193E+04	.202E-01	.101E-02	2.	94.
120	.284E+05	.142E+04	.257E-01	.128E-02	3.	97.
140	.692E+04	.346E+03	.994E-02	.497E-03	1.	98.
160	.356E+04	.178E+03	.763E-02	.381E-03	1.	98.
180	.000E+00	.000E+00	.000E+00	.000E+00	0.	98.
200	.137E+04	.684E+02	.573E-02	.286E-03	1.	99.
220	.148E+04	.741E+02	.826E-02	.413E-03	1.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .734 CPS LWC(GM-3)= .206

ASP COUNTS(CC-1)= 405. CPS COUNTS(LIT-1)= 3.

.90 GRAMS PER CUBIC METER @ 27. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 318

2/ 4/80
TAPE # 109
FLIGHT # 9
STAND-OFF DISTANCE 200 FEET
WATER FLOW RATE OF 12. GPM
SAMPLE TIME 1119: 6

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.195E+08	.649E+07	.275E-03	.918E-04	0.	0.
6	.154E+09	.514E+08	.175E-01	.582E-02	2.	2.
9	.113E+09	.376E+08	.431E-01	.144E-01	6.	8.
12	.692E+08	.231E+08	.626E-01	.209E-01	8.	17.
15	.439E+08	.146E+08	.776E-01	.259E-01	11.	27.
18	.268E+08	.894E+07	.819E-01	.273E-01	11.	38.
21	.159E+08	.526E+07	.765E-01	.255E-01	10.	49.
24	.774E+07	.258E+07	.560E-01	.187E-01	8.	56.
27	.431E+07	.144E+07	.444E-01	.148E-01	6.	62.
30	.238E+07	.795E+06	.337E-01	.112E-01	5.	67.
33	.199E+07	.664E+06	.375E-01	.125E-01	5.	72.
36	.105E+07	.348E+06	.255E-01	.851E-02	3.	75.
39	.751E+06	.250E+06	.233E-01	.778E-02	3.	78.
42	.490E+06	.163E+06	.190E-01	.634E-02	3.	81.
45	.555E+06	.185E+06	.265E-01	.883E-02	4.	85.
60	.386E+06	.193E+05	.436E-01	.218E-02	6.	91.
80	.963E+05	.482E+04	.258E-01	.129E-02	3.	94.
100	.217E+05	.108E+04	.114E-01	.568E-03	2.	96.
120	.177E+05	.886E+03	.160E-01	.802E-03	2.	98.
140	.000E+00	.000E+00	.000E+00	.000E+00	0.	98.
160	.593E+04	.296E+03	.127E-01	.636E-03	2.	99.
180	.127E+04	.635E+02	.388E-02	.194E-03	1.	100.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .620 CPS LWC(GM-3)= .137

ASP COUNTS(CC-1)= 462. CPS COUNTS(LIT-1)= 2.

.74 GRAMS PER CUBIC METER @ 23. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUN-IN 318

2/ 4/80
TAPE # 109
FLIGHT # 9
STAND-OFF DISTANCE 300 FEET
WATER FLOW RATE OF 12. GPM
SAMPLE TIME 1122:15

DIAMETER	NUMBER(M=3)	NUMBER(M=3(M=1)	MASS(GM=3)	MASS(GM=3(M=1)	PERCENT	CUM PERCENT
3	.791E+07	.264E+07	.112E-03	.373E-04	0.	0.
6	.147E+09	.490E+08	.166E-01	.554E-02	2.	2.
9	.123E+09	.410E+08	.470E-01	.157E-01	5.	7.
12	.809E+08	.270E+08	.732E-01	.244E-01	8.	16.
15	.492E+08	.164E+08	.869E-01	.290E-01	10.	26.
18	.273E+08	.910E+07	.834E-01	.278E-01	10.	35.
21	.192E+08	.639E+07	.930E-01	.310E-01	11.	46.
24	.947E+07	.316E+07	.686E-01	.229E-01	8.	54.
27	.680E+07	.227E+07	.700E-01	.233E-01	8.	62.
30	.304E+07	.101E+07	.430E-01	.143E-01	5.	67.
33	.216E+07	.719E+06	.406E-01	.135E-01	5.	72.
36	.150E+07	.501E+06	.367E-01	.122E-01	4.	76.
39	.947E+06	.316E+06	.294E-01	.981E-02	3.	79.
42	.817E+06	.272E+06	.317E-01	.106E-01	4.	83.
45	.751E+06	.250E+06	.359E-01	.120E-01	4.	87.
60	.235E+06	.117E+05	.266E-01	.133E-02	3.	90.
80	.821E+05	.410E+04	.220E-01	.110E-02	3.	93.
100	.386E+05	.193E+04	.202E-01	.101E-02	2.	95.
120	.230E+05	.115E+04	.208E-01	.104E-02	2.	97.
140	.692E+04	.346E+03	.994E-02	.497E-03	1.	99.
160	.119E+04	.593E+02	.254E-02	.127E-03	0.	99.
180	.127E+04	.635E+02	.388E-02	.194E-03	0.	99.
200	.137E+04	.684E+02	.573E-02	.286E-03	1.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM=3)= .756 CPS LWC(GM=3)= .146

ASP COUNTS(CC=1)= 480. CPS COUNTS(LIT=1)= 3.

.87 GRAMS PER CUBIC METER @ 24. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 318

2/ 4/80
TAPE # 109
FLIGHT # 9
STAND-OFF DISTANCE 200 FEET
WATER FLOW RATE OF 10. GPM
SAMPLE TIME 1125:18

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.285E+08	.948E+07	.402E-03	.134E-03	0.	0.
6	.172E+09	.574E+08	.195E-01	.649E-02	3.	3.
9	.130E+09	.435E+08	.498E-01	.166E-01	8.	11.
12	.801E+08	.267E+08	.725E-01	.242E-01	11.	21.
15	.455E+08	.152E+08	.804E-01	.268E-01	12.	34.
18	.261E+08	.870E+07	.797E-01	.266E-01	12.	46.
21	.140E+08	.468E+07	.681E-01	.227E-01	10.	56.
24	.774E+07	.258E+07	.560E-01	.187E-01	8.	64.
27	.366E+07	.122E+07	.377E-01	.126E-01	6.	70.
30	.206E+07	.686E+06	.291E-01	.970E-02	4.	74.
33	.154E+07	.512E+06	.289E-01	.963E-02	4.	79.
36	.150E+07	.501E+06	.367E-01	.122E-01	6.	84.
39	.686E+06	.229E+06	.213E-01	.710E-02	3.	88.
42	.359E+06	.120E+06	.139E-01	.465E-02	2.	90.
45	.261E+06	.871E+05	.125E-01	.416E-02	2.	92.
60	.145E+06	.723E+04	.164E-01	.818E-03	2.	94.
80	.785E+05	.392E+04	.210E-01	.105E-02	3.	97.
100	.723E+04	.362E+03	.379E-02	.189E-03	1.	98.
120	.532E+04	.266E+03	.481E-02	.241E-03	1.	98.
140	.138E+04	.692E+02	.199E-02	.994E-04	0.	99.
160	.000E+00	.000E+00	.000E+00	.000E+00	0.	99.
180	.000E+00	.000E+00	.000E+00	.000E+00	0.	99.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	99.
220	.148E+04	.741E+02	.826E-02	.413E-03	1.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .607 CPS LWC(GM-3)= .080

ASP COUNTS(CC-1)= 515. CPS COUNTS(L11-1)= 2.

.66 GRAMS PER CUBIC METER @ 21. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUN-1M 31R

21 4/80
TAPE # 109
FLIGHT # 9
STAND-OFF DISTANCE 300 FEET
WATER FLOW RATE OF 10. GPM
SAMPLE TIME 1126:55

DIAMETER	NUMBER(M=3)	NUMBER(M=3U=1)	MASS(GM=3)	MASS(GM=3U=1)	PERCENT	CUM PERCENT
3	.000E+00	.000E+00	.000E+00	.000E+00	0.	0.
6	.111E+09	.370E+08	.126E-01	.419E-02	2.	2.
9	.986E+08	.322E+08	.369E-01	.123E-01	6.	7.
12	.604E+08	.201F+08	.547E-01	.182E-01	8.	16.
15	.355E+08	.118F+08	.627E-01	.209E-01	9.	25.
18	.229E+08	.764E+07	.700E-01	.233E-01	11.	36.
21	.137F+08	.455E+07	.662F-01	.221F-01	10.	46.
24	.676E+07	.225E+07	.489E-01	.163F-01	7.	53.
27	.461E+07	.154E+07	.475F-01	.158F-01	7.	60.
30	.238E+07	.795E+06	.337E-01	.112E-01	5.	65.
33	.147E+07	.490E+06	.277E-01	.922E-02	4.	69.
36	.915E+06	.305E+06	.223E-01	.745E-02	3.	73.
39	.947E+06	.316E+06	.294E-01	.981E-02	4.	77.
42	.653E+06	.218E+06	.253E-01	.845E-02	4.	81.
45	.425E+06	.142E+06	.203E-01	.675E-02	3.	84.
60	.253E+06	.127E+05	.286E-01	.143E-02	4.	88.
80	.114E+06	.571E+04	.306E-01	.153E-02	5.	93.
100	.337E+05	.169E+04	.177E-01	.883E-03	3.	95.
120	.124E+05	.620E+03	.112E-01	.561F-03	2.	97.
140	.553E+04	.277E+03	.795E-02	.398E-03	1.	98.
160	.237E+04	.119E+03	.508E-02	.254E-03	1.	99.
180	.000E+00	.000E+00	.000E+00	.000E+00	0.	99.
200	.137E+04	.684E+02	.573E-02	.286E-03	1.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .558 CPS LWC(GM-3)= .133

ASP COUNTS(CC-1)= 358. CPS COUNTS(LIT-1)= 2.

.67 GRAMS PER CUB. METER @ 24. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUN-1F 31A

2/ 4/80
TAPE # 109
FLIGHT # 9
STAND-OFF DISTANCE 200 FEET
WATER FLOW RATE OF 7. GPM
SAMPLE TIME 1132:12

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.452E+08	.151E+08	.640E-03	.213E-03	0.	0.
6	.125E+09	.417E+08	.141E-01	.471E-02	4.	4.
9	.882E+08	.294E+08	.337E-01	.112E-01	10.	14.
12	.416E+08	.139E+08	.376E-01	.125E-01	11.	24.
15	.194E+08	.647E+07	.343E-01	.114E-01	10.	34.
18	.101E+08	.335E+07	.307E-01	.102E-01	9.	43.
21	.506E+07	.169E+07	.246E-01	.818E-02	7.	50.
24	.225E+07	.751E+06	.163E-01	.544E-02	5.	54.
27	.104E+07	.359E+06	.111E-01	.370E-02	3.	57.
30	.784E+06	.261E+06	.111E-01	.369E-02	3.	61.
33	.784E+06	.261E+06	.148E-01	.492E-02	4.	65.
36	.425E+06	.142E+06	.104E-01	.346E-02	3.	68.
39	.131E+06	.436E+05	.406E-02	.135E-02	1.	69.
42	.131E+06	.436E+05	.507E-02	.169E-02	1.	70.
45	.980E+05	.327E+05	.456E-02	.152E-02	1.	72.
60	.157E+06	.783E+04	.177E-01	.666E-03	5.	77.
80	.856E+05	.428E+04	.230E-01	.115E-02	6.	83.
100	.217E+05	.108E+04	.114E-01	.568E-03	3.	86.
120	.159E+05	.797E+03	.144E-01	.722E-03	4.	90.
140	.111E+05	.553E+03	.159E-01	.795E-03	4.	95.
160	.474E+04	.237E+03	.102E-01	.508E-03	3.	98.
180	.254E+04	.127E+03	.776E-02	.388E-03	2.	100.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .253 CPS LWC(GM-3)= .117

ASP COUNTS(CC-1)= 340. CPS COUNTS(LIT-1)= 1.

.35 GRAMS PER CUBIC METER @ 23. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JOH-1H 318

2/ 4/80
TAPE # 109
FLIGHT # 9
STAND-OFF DISTANCE 300 FEET
WATER FLOW RATE OF 7. GPM
SAMPLE TIME 1136:19

DIAMETER	NUMBER(M-3)	NUMBER(M-3)(-1)	MASS(GM-3)	MASS(GM-3)(-1)	PERCENT	CUM PERCENT
3	.23[illegible]E+08	.785E+07	.333E-03	.111E-03	0.	0.
6	.138E+09	.461E+08	.157E-01	.522E-02	4.	4.
9	.847E+08	.282E+08	.323E-01	.108E-01	7.	11.
12	.504E+08	.169E+08	.459E-01	.153E-01	10.	21.
15	.251E+08	.836E+07	.443E-01	.148E-01	10.	31.
18	.159E+08	.529E+07	.485E-01	.162E-01	11.	42.
21	.76[illegible]E+07	.256E+07	.372E-01	.124E-01	8.	51.
24	.44[illegible]E+07	.149E+07	.324E-01	.108E-01	7.	58.
27	.27[illegible]E+07	.926E+06	.286E-01	.954E-02	6.	65.
30	.163E+07	.544E+06	.231E-01	.770E-02	5.	70.
33	.127E+07	.425E+06	.240E-01	.799E-02	5.	75.
36	.555E+06	.185E+06	.136E-01	.452E-02	3.	78.
39	.229E+06	.762E+05	.710E-02	.237E-02	2.	80.
42	.425E+06	.142E+06	.165E-01	.549E-02	4.	84.
45	.359E+06	.120E+06	.171E-01	.572E-02	4.	88.
60	.163E+06	.813E+04	.184E-01	.920E-03	4.	92.
80	.749E+05	.375E+04	.201E-01	.100E-02	5.	96.
100	.964E+04	.482E+03	.505E-02	.252E-03	1.	98.
120	.532E+04	.266E+03	.481E-02	.241E-03	1.	99.
140	.138E+04	.692E+02	.199E-02	.994E-04	0.	99.
160	.000E+00	.000E+00	.000E+00	.000E+00	0.	99.
180	.127E+04	.635E+02	.388E-02	.194E-03	1.	100.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .347 CPS LWC(GM-3)= .075

ASP COUNTS(CC-1)= 354. CPS COUNTS(LIT-1)= 2.

.44 GRAMS PER CUBIC METER @ 22. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JOH-1H 31A

2/ 4/80
TAPE # 109
FLIGHT # 9
STAND-OFF DISTANCE 200 FEET
WATER FLOW RATE OF 5. GPM
SAMPLE TIME 1139:52

DIAMETER	NUMBER(N=3)	NUMBER(M=3D=1)	MASS(GM=3)	MASS(GM=3D=1)	PERCENT	CUM PERCENT
3	.271E+08	.904E+07	.383E-03	.128E-03	0.	0.
6	.134E+09	.447E+08	.152E-01	.506E-02	4.	4.
9	.900E+08	.300E+08	.344E-01	.115E-01	9.	13.
12	.524E+08	.175E+08	.474E-01	.158E-01	13.	26.
15	.270E+08	.899E+07	.477E-01	.159E-01	13.	38.
18	.159E+08	.529E+07	.485E-01	.162E-01	13.	51.
21	.787E+07	.262E+07	.382E-01	.127E-01	10.	61.
24	.405E+07	.135E+07	.293E-01	.977E-02	8.	69.
27	.199E+07	.664E+06	.205E-01	.685E-02	5.	74.
30	.134E+07	.448E+06	.189E-01	.631E-02	5.	79.
33	.751E+06	.250E+06	.141E-01	.471E-02	4.	83.
36	.392E+06	.131E+06	.958E-02	.319E-02	3.	86.
39	.327E+06	.109E+06	.101E-01	.338E-02	3.	88.
42	.980E+05	.327E+05	.380E-02	.127E-02	1.	89.
45	.261E+06	.871E+05	.125E-01	.416E-02	3.	93.
60	.663E+05	.331E+04	.750E-02	.375E-03	2.	95.
80	.321E+05	.161E+04	.861E-02	.430E-03	2.	97.
100	.964E+04	.482E+03	.505E-02	.252E-03	1.	98.
120	.709E+04	.354E+03	.641E-02	.321E-03	2.	100.
140	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
160	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
180	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM=3)= .351 CPS LWC(GM=3)= .035

ASP COUNTS(CC=1)= 364. CPS COUNTS(LIT=1)= 0.

.38 GRAMS PER CUBIC METER @ 19. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUN-1M 31R

2/ 4/80
TAPE # 109
FLIGHT # 9
STAND-OFF DISTANCE 300 FEET
WATER FLOW RATE OF 5. GPM
SAMPLE TIME 1142:50

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.000E+00	.000E+00	.000E+00	.000E+00	0.	0.
6	.96ME+08	.329E+06	.112E-01	.372E-02	3.	3.
9	.827E+08	.276E+08	.316E-01	.105E-01	7.	10.
12	.537E+08	.179E+08	.486E-01	.162E-01	12.	22.
15	.313E+08	.104E+08	.554E-01	.185E-01	13.	35.
18	.17AE+08	.592E+07	.543E-01	.181E-01	13.	48.
21	.101E+08	.33AE+07	.491E-01	.164E-01	12.	59.
24	.46AE+07	.155E+07	.336E-01	.112E-01	8.	67.
27	.271E+07	.90AE+06	.279E-01	.931E-02	7.	74.
30	.167E+07	.555E+06	.236E-01	.785E-02	6.	80.
33	.78AE+06	.261E+06	.148E-01	.492E-02	4.	83.
36	.653E+06	.21AE+06	.160E-01	.532E-02	4.	87.
39	.490E+06	.163E+06	.152E-01	.507E-02	4.	90.
42	.201E+06	.671E+05	.101E-01	.33AE-02	2.	93.
45	.201E+06	.671E+05	.125E-01	.416E-02	3.	96.
60	.723E+05	.362E+04	.A1AE-02	.409E-03	2.	98.
80	.107E+05	.535E+03	.267E-02	.143E-03	1.	98.
100	.482E+04	.241E+03	.252E-02	.126E-03	1.	99.
120	.177E+04	.886E+02	.160E-02	.802E-04	0.	99.
140	.000E+00	.000E+00	.000E+00	.000E+00	0.	99.
160	.119E+04	.593E+02	.254E-02	.127E-03	1.	100.
180	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .404 CPS LWC(GM-3)= .025

ASP COUNTS(CC-1)= 306. CPS COUNTS(LIT-1)= 0.

.42 GRAMS PER CUBIC METER @ 20. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUN-1H 31P

2/ 4/80
TAPE # 109
FLIGHT # 9
STAND-OFF DISTANCE 200 FEET
WATER FLOW RATE OF 30. GPM
SAMPLE TIME 1146: 3

DIAMETER	NUMBER(M=3)	NUMBER(M=3U-1)	MASS(GM=3)	MASS(GM=3U-1)	PERCENT	CUM PERCENT
3	.393E+08	.131E+08	.556E-03	.185E-03	0.	0.
6	.192E+09	.640E+08	.217E-01	.724E-02	2.	2.
9	.119E+09	.397E+08	.455E-01	.152E-01	3.	5.
12	.469E+08	.156E+08	.425E-01	.142E-01	3.	8.
15	.215E+08	.715E+07	.379E-01	.126E-01	3.	11.
18	.134E+08	.445E+07	.409E-01	.136E-01	3.	14.
21	.872E+07	.291E+07	.423E-01	.141E-01	3.	17.
24	.533E+07	.180E+07	.390E-01	.130E-01	3.	20.
27	.379E+07	.126E+07	.391E-01	.130E-01	3.	23.
30	.261E+07	.871E+06	.369E-01	.123E-01	3.	26.
33	.176E+07	.588E+06	.332E-01	.111E-01	2.	28.
36	.160E+07	.534E+06	.391E-01	.130E-01	3.	31.
39	.105E+07	.348E+06	.325E-01	.108E-01	2.	34.
42	.817E+06	.272E+06	.317E-01	.106E-01	2.	36.
45	.751E+06	.250E+06	.359E-01	.120E-01	3.	39.
60	.201E+07	.100E+06	.227E+00	.113E-01	17.	56.
80	.756E+06	.376E+05	.203E+00	.101E-01	15.	71.
100	.207E+06	.104E+05	.109E+00	.543E-02	8.	79.
120	.886E+05	.443E+04	.802E-01	.401E-02	6.	85.
140	.498E+05	.249E+04	.716E-01	.358E-02	5.	91.
160	.213E+05	.107E+04	.458E-01	.229E-02	3.	94.
180	.508E+04	.254E+03	.155E-01	.776E-03	1.	95.
200	.547E+04	.274E+03	.229E-01	.115E-02	2.	97.
220	.148E+04	.741E+02	.826E-02	.413E-03	1.	98.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	98.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	98.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	98.
300	.222E+04	.111E+03	.314E-01	.157E-02	2.	100.

ASP LWC(GM-3)= .519 CPS LWC(GM-3)= .986

ASP COUNTS(CC-1)= 459. CPS COUNTS(LIT-1)= 14.

1.33 GRAMS PER CUBIC METER @ 63. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 318

2/ 4/80
TAPE # 109
FLIGHT # 9
STAND-OFF DISTANCE 200 FEET
WATER FLOW RATE OF 50. GPM
SAMPLE TIME 1152: 3

DIAMETER	NUMBER(M=3)	NUMBER(M=3D=1)	MASS(GM=3)	MASS(GM=3D=1)	PERCENT	CUM PERCENT
3	.557E+08	.186E+08	.787E-03	.262E-03	0.	0.
6	.217E+09	.722E+08	.245E-01	.817E-02	1.	1.
9	.144E+09	.480E+08	.550E-01	.183E-01	3.	4.
12	.572E+08	.191E+08	.518E-01	.173E-01	3.	7.
15	.230E+08	.767E+07	.406E-01	.135E-01	2.	9.
18	.938E+07	.313E+07	.286E-01	.954E-02	1.	10.
21	.647E+07	.216E+07	.314E-01	.105E-01	2.	11.
24	.232E+07	.773E+06	.168E-01	.560E-02	1.	12.
27	.882E+06	.294E+06	.909E-02	.303E-02	0.	13.
30	.686E+06	.229E+06	.970E-02	.323E-02	0.	13.
33	.555E+06	.185E+06	.105E-01	.348E-02	1.	14.
36	.392E+06	.131E+06	.958E-02	.319E-02	0.	14.
39	.261E+06	.871E+05	.812E-02	.271E-02	0.	15.
42	.131E+06	.436E+05	.507E-02	.169E-02	0.	15.
45	.131E+06	.436E+05	.623E-02	.208E-02	0.	15.
60	.230E+07	.115E+06	.260E+00	.130E-01	13.	28.
80	.110E+07	.549E+05	.295E+00	.147E-01	15.	43.
100	.340E+06	.170E+05	.178E+00	.890E-02	9.	51.
120	.177E+06	.886E+04	.160E+00	.802E-02	8.	59.
140	.941E+05	.470E+04	.135E+00	.676E-02	7.	66.
160	.486E+05	.243E+04	.104E+00	.521E-02	5.	71.
180	.319E+05	.159E+04	.970E-01	.485E-02	5.	76.
200	.151E+05	.752E+03	.630E-01	.315E-02	3.	79.
220	.104E+05	.519E+03	.574E-01	.289E-02	3.	82.
240	.113E+05	.566E+03	.819E-01	.409E-02	4.	86.
260	.711E+04	.356E+03	.655E-01	.327E-02	3.	89.
280	.138E+05	.691E+03	.159E+00	.795E-02	8.	97.
300	.445E+04	.222E+03	.628E-01	.314E-02	3.	100.

ASP LWC(GM=3)= .30A CPS LWC(GM=3)= 1.91

ASP COUNTS(CC=1)= 51A. CPS COUNTS(LIT=1)= 15.

2.03 GRAMS PER CUBIC METER @ 107. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 318

2/ 4/80
TAPE # 109
FLIGHT # 9
STAND-OFF DISTANCE 200 FEET
WATER FLOW RATE OF 25. GPM
SAMPLE TIME 1154:57

DIAMETER	NUMBER(M=3)	NUMBER(M=3U=1)	MASS(GM=3)	MASS(GM=3U=1)	PERCENT	CUM PERCENT
3	.225E+08	.751E+07	.319E-03	.106E-03	0.	0.
6	.606E+08	.202E+08	.685E-02	.228E-02	1.	1.
9	.103E+08	.343E+07	.393E-02	.131E-02	0.	1.
12	.245E+07	.817E+06	.222E-02	.739E-03	0.	2.
15	.137E+07	.457E+06	.242E-02	.808E-03	0.	2.
18	.621E+06	.207E+06	.190E-02	.632E-03	0.	2.
21	.588E+06	.196E+06	.285E-02	.950E-03	0.	3.
24	.359E+06	.120E+06	.260E-02	.867E-03	0.	3.
27	.163E+06	.544E+05	.168E-02	.561E-03	0.	3.
30	.980E+05	.327E+05	.139E-02	.462E-03	0.	3.
33	.980E+05	.327E+05	.184E-02	.615E-03	0.	3.
36	.131E+06	.436E+05	.319E-02	.106E-02	0.	4.
39	.000E+00	.000E+00	.000E+00	.000E+00	0.	4.
42	.000E+00	.000E+00	.000E+00	.000E+00	0.	4.
45	.000E+00	.000E+00	.000E+00	.000E+00	0.	4.
60	.152E+07	.762E+05	.172E+00	.862E-02	21.	25.
80	.664E+06	.332E+05	.178E+00	.890E-02	22.	47.
100	.219E+06	.110E+05	.115E+00	.574E-02	14.	61.
120	.957E+05	.479E+04	.866E-01	.433E-02	11.	72.
140	.429E+05	.214E+04	.616E-01	.308E-02	8.	79.
160	.237E+05	.119E+04	.508E-01	.254E-02	6.	86.
180	.152E+05	.762E+03	.465E-01	.233E-02	6.	91.
200	.547E+04	.274E+03	.229E-01	.115E-02	3.	94.
220	.445E+04	.222E+03	.248E-01	.124E-02	3.	97.
240	.323E+04	.162E+03	.234E-01	.117E-02	3.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM=3)= .031 CPS LWC(GM=3)= .001

ASP COUNTS(CC=1)= 94. CPS COUNTS(LIT=1)= 11.

.31 GRAMS PER CUBIC METER @ 94. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUN-1H 318

2/ 4/80
TAPE # 109
FLIGHT # 9
STAND-OFF DISTANCE 200 FEET
WATER FLOW RATE OF 8. GPM
SAMPLE TIME 12 1:54

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.000E+00	.000E+00	.000E+00	.000E+00	0.	0.
6	.490E+08	.163E+08	.554E-02	.185E-02	2.	2.
9	.124E+08	.414E+07	.474E-02	.158E-02	2.	4.
12	.483E+07	.161E+07	.437E-02	.146E-02	2.	5.
15	.238E+07	.795E+06	.421E-02	.140E-02	2.	7.
18	.134E+07	.446E+06	.409E-02	.136E-02	1.	8.
21	.947E+06	.316E+06	.459E-02	.153E-02	2.	10.
24	.457E+06	.152E+06	.331E-02	.110E-02	1.	11.
27	.196E+06	.653E+05	.202E-02	.673E-03	1.	12.
30	.980E+05	.327E+05	.139E-02	.462E-03	1.	12.
33	.131E+06	.436E+05	.246E-02	.820E-03	1.	13.
36	.000E+00	.000E+00	.000E+00	.000E+00	0.	13.
39	.000E+00	.000E+00	.000E+00	.000E+00	0.	13.
42	.000E+00	.000E+00	.000E+00	.000E+00	0.	13.
45	.327E+05	.109E+05	.156E-02	.520E-03	1.	14.
60	.759E+06	.380E+05	.859E-01	.429E-02	31.	45.
80	.253E+06	.127E+05	.679E-01	.340E-02	25.	70.
100	.434E+05	.217E+04	.227E-01	.114E-02	8.	78.
120	.159E+05	.797E+03	.144E-01	.722E-03	5.	83.
140	.111E+05	.553E+03	.159E-01	.795E-03	6.	89.
160	.119E+04	.593E+02	.254E-02	.127E-03	1.	90.
180	.508E+04	.254E+03	.155E-01	.774E-03	6.	96.
200	.274E+04	.137E+03	.115E-01	.573E-03	4.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .038 CPS LWC(GM-3)= .294

ASP COUNTS(CC-1)= 72. CPS COUNTS(LIT-1)= 5.

.27 GRAMS PER CUBIC METER @ 74. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 31R

2/ 6/80
TAPE # 110
FLIGHT # 10
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 15. GPM
SAMPLE TIME 1343:53

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.000E+00	.000E+00	.000E+00	.000E+00	0.	0.
6	.917E+08	.306E+08	.104E-01	.346E-02	1.	1.
9	.688E+08	.229E+08	.263E-01	.876E-02	3.	4.
12	.433E+08	.144E+08	.392E-01	.131E-01	4.	9.
15	.267E+08	.891E+07	.472E-01	.157E-01	5.	14.
18	.182E+08	.607E+07	.556E-01	.185E-01	6.	20.
21	.129E+08	.431E+07	.627E-01	.209E-01	7.	27.
24	.631E+07	.210E+07	.456E-01	.152E-01	5.	32.
27	.516E+07	.172E+07	.532E-01	.177E-01	6.	38.
30	.284E+07	.947E+06	.402E-01	.134E-01	5.	43.
33	.232E+07	.773E+06	.436E-01	.145E-01	5.	48.
36	.111E+07	.370E+06	.271E-01	.904E-02	3.	51.
39	.150E+07	.501E+06	.467E-01	.156E-01	5.	56.
42	.653E+06	.218E+06	.253E-01	.845E-02	3.	59.
45	.817E+06	.272E+06	.390E-01	.130E-01	4.	64.
60	.392E+05	.196E+05	.443E-01	.221E-02	5.	69.
80	.136E+06	.678E+04	.363E-01	.182E-02	4.	73.
100	.886E+05	.434E+04	.454E-01	.227E-02	5.	78.
120	.603E+05	.301E+04	.545E-01	.273E-02	6.	84.
140	.194E+05	.968E+03	.278E-01	.139E-02	3.	87.
160	.119E+05	.593E+03	.254E-01	.127E-02	3.	90.
180	.889E+04	.445E+03	.271E-01	.136E-02	3.	93.
200	.410E+04	.205E+03	.172E-01	.859E-03	2.	95.
220	.593E+04	.296E+03	.330E-01	.165E-02	4.	99.
240	.162E+04	.808E+02	.117E-01	.585E-03	1.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .562 CPS LWC(GM-3)= .369

ASP COUNTS(LC-1)= 282. CPS COUNTS(LIT-1)= 5.

.89 GRAMS PER CUBIC METER @ 37. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUM-1H 318

2/ 6/80
TAPE # 110
FLIGHT # 10
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 12. GPM
SAMPLE TIME 1345:27

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.278E+08	.927E+07	.393E-03	.131E-03	0.	0.
6	.175E+09	.583E+08	.198E-01	.661E-02	3.	3.
9	.121E+09	.402E+08	.460E-01	.153E-01	6.	9.
12	.714E+08	.238E+08	.646E-01	.215E-01	9.	18.
15	.405E+08	.135E+08	.715E-01	.238E-01	10.	27.
18	.234E+08	.781E+07	.715E-01	.238E-01	10.	37.
21	.139E+08	.464E+07	.675E-01	.225E-01	9.	46.
24	.657E+07	.219E+07	.475E-01	.158E-01	6.	52.
27	.425E+07	.142E+07	.438E-01	.146E-01	6.	58.
30	.212E+07	.708E+06	.300E-01	.100E-01	4.	62.
33	.167E+07	.555E+06	.314E-01	.105E-01	4.	66.
36	.127E+07	.425E+06	.311E-01	.104E-01	4.	70.
39	.555E+06	.185E+06	.172E-01	.575E-02	2.	73.
42	.653E+06	.218E+06	.253E-01	.845E-02	3.	76.
45	.490E+06	.163E+06	.234E-01	.779E-02	3.	79.
60	.217E+06	.108E+05	.245E-01	.123E-02	3.	83.
80	.92BE+05	.464E+04	.249E-01	.124E-02	3.	86.
100	.241E+05	121E+04	.126E-01	.631E-03	2.	88.
120	.213E+05	.106E+04	.192E-01	.962E-03	3.	90.
140	.692E+04	.346E+03	.994E-02	.497E-03	1.	91.
160	.358E+04	.178E+03	.763E-02	.381E-03	1.	93.
180	.254E+04	.127E+03	.776E-02	.388E-03	1.	94.
200	.410E+04	.205E+03	.172E-01	.859E-03	2.	96.
220	.148E+04	.741E+02	.826E-02	.413E-03	1.	97.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	97.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	97.
280	.198E+04	.988E+02	.227E-01	.114E-02	3.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .591 CPS LWC(GM-3)= .190

ASP COUNTS(CC-1)= 490. CPS COUNTS(LIT-1)= 3.

.75 GRAMS PER CUBIC METER @ 24. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 318

21 6/80
TAPE # 110
FLIGHT # 10
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 10. GPM
SAMPLE TIME 1348:10

DIAMETER	NUMBER(M-3)	NUMBER(M-3(I-1)	MASS(GM-3)	MASS(GM-3(I-1)	PERCENT	CUM PERCENT
3	.321E+10	.107E+08	.454E-03	.151E-03	0.	0.
6	.169E+09	.505E+08	.191E-01	.638E-02	3.	3.
9	.114E+09	.340E+08	.453E-01	.151E-01	7.	11.
12	.684E+08	.229E+08	.621E-01	.207E-01	10.	21.
15	.375E+08	.125E+08	.663E-01	.221E-01	11.	32.
18	.209E+08	.698E+07	.639E-01	.213E-01	10.	42.
21	.120E+08	.401E+07	.583E-01	.194E-01	10.	52.
24	.552E+07	.184E+07	.400E-01	.133E-01	7.	59.
27	.369E+07	.123E+07	.380E-01	.127E-01	6.	65.
30	.219E+07	.730E+06	.309E-01	.103E-01	5.	70.
33	.132E+07	.444E+06	.264E-01	.881E-02	4.	74.
36	.882E+06	.294E+06	.215E-01	.718E-02	4.	77.
39	.523E+06	.174E+06	.162E-01	.541E-02	3.	80.
42	.457E+06	.152E+06	.177E-01	.591E-02	3.	83.
45	.621E+06	.207E+06	.296E-01	.987E-02	5.	88.
60	.175E+06	.587E+05	.198E-01	.988E-03	3.	91.
80	.571E+05	.285E+05	.153E-01	.765E-03	3.	94.
100	.121E+05	.603E+04	.631E-02	.315E-03	1.	95.
120	.177E+05	.886E+04	.180E-01	.802E-03	3.	97.
140	.692E+04	.346E+04	.994E-02	.497E-03	2.	99.
160	.119E+04	.593E+03	.254E-02	.127E-03	0.	99.
180	.127E+04	.635E+03	.388E-02	.194E-03	1.	100.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .53E CPS LWC(GM-3)= .103

ASP COUNTS(CC-1)= 470. CPS COUNTS(LIT-1)= 2.

.61 GRAMS PER CUBIC METER @ [illegible] MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 318

21 6/80
TAPE # 110
FLIGHT # 10
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 9. GPM
SAMPLE TIME 1351: 1

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.483E+08	.161E+08	.683E-03	.228E-03	0.	0.
6	.189E+09	.631E+08	.214E-01	.713E-02	4.	4.
9	.119E+09	.395E+08	.453E-01	.151E-01	9.	13.
12	.607E+08	.202E+08	.549E-01	.183E-01	11.	24.
15	.331E+08	.110E+08	.585E-01	.195E-01	11.	35.
18	.171E+08	.570E+07	.522E-01	.174E-01	10.	45.
21	.993E+07	.331E+07	.482E-01	.161E-01	9.	55.
24	.451E+07	.150E+07	.326E-01	.109E-01	6.	61.
27	.271E+07	.904E+06	.279E-01	.931E-02	5.	66.
30	.137E+07	.457E+06	.194E-01	.647E-02	4.	70.
33	.915E+06	.305E+06	.172E-01	.574E-02	3.	73.
36	.621E+06	.207E+06	.152E-01	.505E-02	3.	76.
39	.392E+06	.131E+06	.122E-01	.406E-02	2.	79.
42	.392E+06	.131E+06	.152E-01	.507E-02	3.	82.
45	.425E+06	.142E+06	.203E-01	.675E-02	4.	86.
60	.151E+06	.753E+04	.170E-01	.852E-03	3.	89.
80	.785E+05	.392E+04	.210E-01	.105E-02	4.	93.
100	.121E+05	.603E+03	.631E-02	.315E-03	1.	94.
120	.142E+05	.709E+03	.128E-01	.641E-03	2.	97.
140	.277E+04	.138E+03	.398E-02	.199E-03	1.	97.
160	.000E+00	.000E+00	.000E+00	.000E+00	0.	97.
180	.254E+04	.127E+03	.776E-02	.388E-03	2.	99.
200	.137E+04	.684E+02	.573E-02	.286E-03	1.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .441 CPS LWC(GM-3)= .094

ASP COUNTS(CC-1)= 488. CPS COUNTS(LIT-1)= 2.

.52 GRAMS PER CUBIC METER @ 21. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 318

2/ 6/80
TAPE # 110
FLIGHT # 10
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 6. GPM
SAMPLE TIME 1353:12

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.507E+08	.169E+08	.717E-03	.239E-03	0.	0.
6	.178E+09	.594E+08	.202E-01	.672E-02	4.	4.
9	.117E+09	.389E+08	.445E-01	.148E-01	8.	12.
12	.619E+08	.206E+08	.560E-01	.187E-01	10.	22.
15	.300E+08	.100E+08	.531E-01	.177E-01	10.	31.
18	.168E+08	.559E+07	.512E-01	.171E-01	9.	41.
21	.103E+08	.344E+07	.501E-01	.167E-01	9.	50.
24	.516E+07	.172E+07	.374E-01	.125E-01	7.	56.
27	.271E+07	.904E+06	.279E-01	.931E-02	5.	61.
30	.154E+07	.512E+06	.217E-01	.724E-02	4.	65.
33	.118E+07	.392E+06	.221E-01	.738E-02	4.	69.
36	.588E+06	.196E+06	.144E-01	.479E-02	3.	72.
39	.490E+06	.163E+06	.152E-01	.507E-02	3.	75.
42	.294E+06	.980E+05	.114E-01	.380E-02	2.	77.
45	.224E+06	.762E+05	.109E-01	.364E-02	2.	79.
60	.157E+06	.783E+04	.177E-01	.886E-03	3.	82.
80	.892E+05	.446E+04	.239E-01	.120E-02	4.	86.
100	.315E+05	.157E+04	.164E-01	.820E-03	3.	89.
120	.142E+05	.709E+03	.128E-01	.641E-03	2.	91.
140	.125E+05	.623E+03	.179E-01	.894E-03	3.	95.
160	.474E+04	.237E+03	.102E-01	.508E-03	2.	96.
180	.127E+04	.635E+02	.388E-02	.194E-03	1.	97.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	97.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	97.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	97.
260	.178E+04	.889E+02	.164E-01	.818E-03	3.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .437 CPS LWC(GM-3)= .136

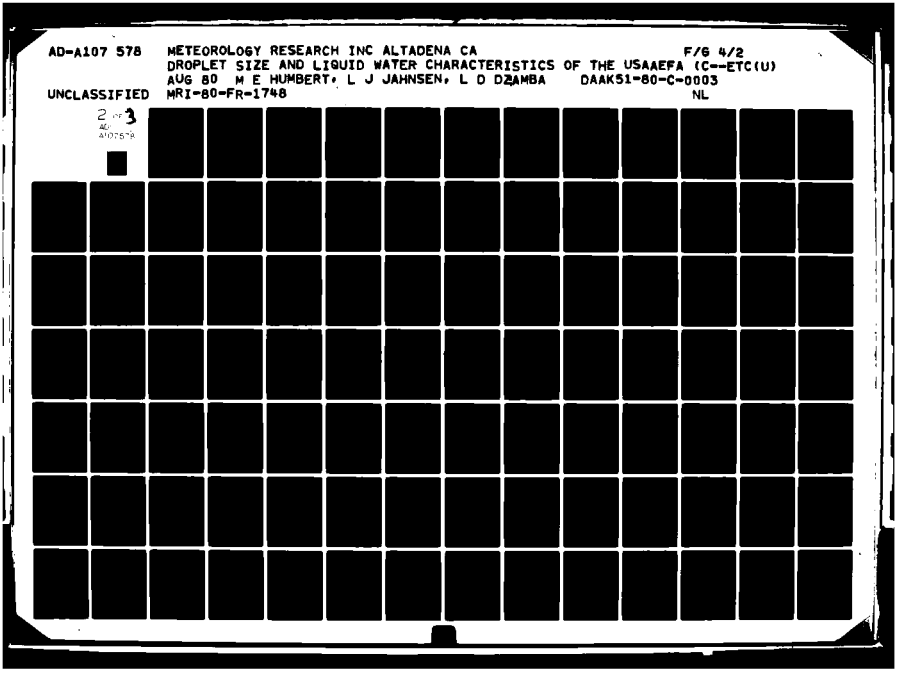
ASP COUNTS(CC-1)= 477. CPS COUNTS(L1T-1)= 2.

.56 GRAMS PER CUBIC METER @ 23. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

AD-A107 578 METEOROLOGY RESEARCH INC ALTADENA CA F/G 4/2
DROPLET SIZE AND LIQUID WATER CHARACTERISTICS OF THE USAAEFA (C--ETC(U)
AUG 80 M E HUMBERT, L J JAHNSEN, L D DZAMBA DAAK51-80-C-0003
UNCLASSIFIED MRI-80-FR-1748 NL

2 OF 3
AD
A107578



HELICOPTER ICING SPRAY SYSTEM TEST FOR JUN-1M 31R

2/ 6/80
TAPE # 110
FLIGHT # 10
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 7. GPM
SAMPLE TIME 1355:27

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.372E+08	.124E+08	.526E-03	.175E-03	0.	0.
6	.152E+09	.506E+08	.172E-01	.575E-02	4.	4.
9	.100E+09	.335E+08	.384E-01	.128E-01	6.	12.
12	.583E+08	.194E+08	.528E-01	.176E-01	11.	23.
15	.308E+08	.103E+08	.544E-01	.181E-01	11.	3 .
18	.176E+08	.587E+07	.538E-01	.179E-01	11.	4
21	.960E+07	.320E+07	.466E-01	.155E-01	10.	55.
24	.490E+07	.163E+07	.355E-01	.118E-01	7.	63.
27	.261E+07	.871E+06	.269E-01	.896E-02	6.	68.
30	.163E+07	.544E+06	.231E-01	.770E-02	5.	73.
33	.124E+07	.414E+06	.234E-01	.779E-02	5.	78.
36	.653E+06	.218E+06	.160E-01	.532E-02	3.	81.
39	.327E+06	.109E+06	.101E-01	.338E-02	2.	83.
42	.294E+06	.980E+05	.114E-01	.380E-02	2.	86.
45	.327E+06	.109E+06	.156E-01	.520E-02	3.	89.
60	.114E+06	.572E+04	.129E-01	.647E-03	3.	92.
80	.714E+05	.357E+04	.191E-01	.956E-03	4.	96.
100	.121E+05	.603E+03	.631E-02	.315E-03	1.	97.
120	.709E+04	.354E+03	.641E-02	.321E-03	1.	98.
140	.138E+04	.692E+02	.199E-02	.994E-04	0.	99.
160	.000E+00	.000E+00	.000E+00	.000E+00	0.	99.
180	.000E+00	.000E+00	.000E+00	.000E+00	0.	99.
200	.137E+04	.684E+02	.573E-02	.286E-03	1.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .426 CPS LWC(GM-3)= .081

ASP COUNTS(CC-1)= 41M. CPS COUNTS(LIT-1)= 2.

.48 GRAMS PER CUBIC METER @ 21. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUN-1H 31A

2/ 6/80
TAPE # 110
FLIGHT # 10
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 6. GPM
SAMPLE TIME 1357:45

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.322E+08	.107E+08	.455E-03	.152E-03	0.	0.
6	.120E+09	.402E+08	.136E-01	.454E-02	5.	5.
9	.785E+08	.262E+08	.300E-01	.998E-02	10.	15.
12	.408E+08	.136E+08	.369E-01	.123E-01	13.	28.
15	.175E+08	.583E+07	.309E-01	.103E-01	11.	38.
18	.938E+07	.313E+07	.286E-01	.954E-02	10.	48.
21	.431E+07	.144E+07	.209E-01	.697E-02	7.	55.
24	.254E+07	.846E+06	.187E-01	.623E-02	6.	61.
27	.203E+07	.675E+06	.209E-01	.696E-02	7.	68.
30	.947E+06	.316E+06	.134E-01	.446E-02	5.	73.
33	.719E+06	.240E+06	.135E-01	.451E-02	5.	78.
36	.261E+06	.871E+05	.638E-02	.213E-02	2.	80.
39	.196E+06	.653E+05	.609E-02	.203E-02	2.	82.
42	.131E+06	.436E+05	.507E-02	.169E-02	2.	83.
45	.653E+05	.218E+05	.312E-02	.104E-02	1.	85.
60	.663E+05	.331E+04	.750E-02	.375E-03	3.	87.
80	.392E+05	.196E+04	.105E-01	.526E-03	4.	91.
100	.723E+04	.362E+03	.379E-02	.189E-03	1.	92.
120	.177E+04	.886E+02	.160E-02	.802E-04	1.	93.
140	.415E+04	.208E+03	.596E-02	.298E-03	2.	95.
160	.119E+04	.593E+02	.254E-02	.127E-03	1.	95.
180	.254E+04	.127E+03	.776E-02	.388E-03	3.	98.
200	.137E+04	.684E+02	.573E-02	.286E-03	2.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .248 CPS LWC(GM-3)= .053

ASP COUNTS(CC-1)= 310. CPS COUNTS(L11-1)= 1.

.29 GRAMS PER CUBIC METER @ 20. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUN-1H 31A

2/ 6/80
TAPE # 110
FLIGHT # 10
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 5. GPM
SAMPLE TIME 14 0: 9

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.507E+08	.169E+08	.716E-03	.239E-03	0.	0.
6	.145E+09	.484E+08	.164E-01	.547E-02	4.	5.
9	.868E+08	.289E+08	.331E-01	.110E-01	9.	13.
12	.452E+08	.151E+08	.409E-01	.136E-01	11.	24.
15	.233E+08	.776E+07	.412E-01	.137E-01	11.	35.
18	.124E+08	.413E+07	.378E-01	.126E-01	10.	45.
21	.693E+07	.231E+07	.336E-01	.112E-01	9.	54.
24	.385E+07	.128E+07	.279E-01	.930E-02	7.	61.
27	.147E+07	.490E+06	.152E-01	.505E-02	4.	65.
30	.111E+07	.370E+06	.157E-01	.523E-02	4.	69.
33	.882E+06	.294E+06	.166E-01	.553E-02	4.	73.
36	.392E+06	.131E+06	.958E-02	.319E-02	3.	76.
39	.229E+06	.762E+05	.710E-02	.237E-02	2.	78.
42	.392E+06	.131E+06	.152E-01	.507E-02	4.	82.
45	.261E+06	.871E+05	.125E-01	.416E-02	3.	85.
60	.133E+06	.663E+04	.150E-01	.750E-03	4.	89.
80	.392E+05	.196E+04	.105E-01	.526E-03	3.	92.
100	.121E+05	.603E+03	.631E-02	.315E-03	2.	93.
120	.886E+04	.443E+03	.802E-02	.401E-03	2.	96.
140	.553E+04	.277E+03	.795E-02	.398E-03	2.	98.
160	.237E+04	.119E+03	.508E-02	.254E-03	1.	99.
180	.127E+04	.635E+02	.388E-02	.194E-03	1.	100.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .323 CPS LWC(GM-3)= .069

ASP COUNTS(CC-1)= 379. CPS COUNTS(LIT-1)= 1.

.38 GRAMS PER CUBIC METER @ 21. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 318

2/ 6/80
TAPE # 110
FLIGHT # 10
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 15. GPM
SAMPLE TIME 1414:38

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.261E+07	.871E+06	.369E-04	.123E-04	0.	0.
6	.102E+09	.339E+08	.115E-01	.384E-02	1.	1.
9	.780E+08	.260E+08	.296E-01	.993E-02	4.	5.
12	.517E+08	.172E+08	.468E-01	.156E-01	6.	10.
15	.295E+08	.984E+07	.522E-01	.174E-01	6.	17.
18	.187E+08	.624E+07	.572E-01	.191E-01	7.	23.
21	.110E+08	.367E+07	.534E-01	.178E-01	6.	30.
24	.696E+07	.232E+07	.504E-01	.168E-01	6.	36.
27	.510E+07	.170E+07	.525E-01	.175E-01	6.	42.
30	.291E+07	.969E+06	.411E-01	.137E-01	5.	47.
33	.235E+07	.784E+06	.443E-01	.148E-01	5.	52.
36	.108E+07	.359E+06	.263E-01	.878E-02	3.	55.
39	.523E+06	.174E+06	.162E-01	.541E-02	2.	57.
42	.719E+06	.240E+06	.279E-01	.929E-02	3.	61.
45	.490E+06	.163E+06	.234E-01	.779E-02	3.	63.
60	.651E+06	.325E+05	.736E-01	.368E-02	9.	72.
80	.228E+06	.114E+05	.612E-01	.306E-02	7.	79.
100	.988E+05	.494E+04	.517E-01	.259E-02	6.	85.
120	.319E+05	.159E+04	.289E-01	.144E-02	3.	89.
140	.180E+05	.899E+03	.256E-01	.129E-02	3.	92.
160	.830E+04	.415E+03	.178E-01	.890E-03	2.	94.
180	.254E+04	.127E+03	.776E-02	.388E-03	1.	95.
200	.137E+04	.684E+02	.573E-02	.286E-03	1.	96.
220	.148E+04	.741E+02	.826E-02	.413E-03	1.	97.
240	.162E+04	.808E+02	.117E-01	.585E-03	1.	98.
260	.178E+04	.889E+02	.164E-01	.818E-03	2.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .533 CPS LWC(GM-3)= .385

ASP COUNTS(CC-1)= 314. CPS COUNTS(L1T-1)= 7.

.84 GRAMS PER CUBIC METER @ 33. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 318

2/ 6/80
TAPE # 110
FLIGHT # 10
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 12. GPM
SAMPLE TIME 1417: 9

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.000E+00	.000E+00	.000E+00	.000E+00	0.	0.
6	.965E+06	.322E+06	.109E-01	.364E-02	2.	2.
9	.745E+06	.248E+06	.285E-01	.949E-02	4.	6.
12	.499E+06	.166E+06	.451E-01	.150E-01	6.	12.
15	.317E+06	.106E+06	.559E-01	.186E-01	8.	20.
18	.187E+06	.623E+07	.571E-01	.190E-01	8.	28.
21	.108E+06	.362E+07	.526E-01	.175E-01	8.	36.
24	.595E+07	.198E+07	.430E-01	.143E-01	6.	42.
27	.431E+07	.144E+07	.444E-01	.148E-01	6.	48.
30	.216E+07	.719E+06	.305E-01	.102E-01	4.	53.
33	.186E+07	.621E+06	.350E-01	.117E-01	5.	58.
36	.947E+06	.316E+06	.231E-01	.771E-02	3.	61.
39	.105E+07	.348E+06	.325E-01	.108E-01	5.	66.
42	.588E+06	.196E+06	.228E-01	.760E-02	3.	69.
45	.392E+06	.131E+06	.187E-01	.623E-02	3.	71.
60	.343E+06	.172E+05	.384E-01	.194E-02	6.	77.
80	.118E+06	.589E+04	.316E-01	.158E-02	5.	82.
100	.627E+05	.313E+04	.328E-01	.164E-02	5.	86.
120	.337E+05	.168E+04	.305E-01	.152E-02	4.	91.
140	.166E+05	.830E+03	.234E-01	.117E-02	3.	94.
160	.107E+05	.533E+03	.229E-01	.114E-02	3.	97.
180	.635E+04	.318E+03	.194E-01	.970E-03	3.	100.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .500 CPS LWC(GM-3)= .240

ASP COUNTS(CC-1)= 299. CPS COUNTS(LIT-1)= 4.

.70 GRAMS PER CUBIC METER @ 30. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUN-IH 31A

21 6/80
TAPE # 110
FLIGHT # 10
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 10. GPM
SAMPLE TIME 1419:36

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.000E+00	.000E+00	.000E+00	.000E+00	0.	0.
6	.950E+08	.317E+08	.107E-01	.35AE-02	2.	2.
9	.744E+08	.24AE+08	.2A4E-01	.946E-02	4.	6.
12	.474E+08	.15AE+08	.429E-01	.143E-01	7.	13.
15	.282E+08	.941E+07	.499E-01	.166E-01	8.	21.
18	.164E+08	.54AE+07	.502E-01	.167E-01	8.	29.
21	.116E+08	.38AE+07	.564E-01	.188E-01	9.	37.
24	.624E+07	.20AE+07	.452E-01	.151E-01	7.	44.
27	.366E+07	.122E+07	.377E-01	.126E-01	6.	50.
30	.225E+07	.751E+06	.319E-01	.106E-01	5.	55.
33	.186E+07	.621E+06	.350E-01	.117E-01	5.	61.
36	.980E+06	.327E+06	.239E-01	.796E-02	4.	65.
39	.882E+06	.294E+06	.274E-01	.913E-02	4.	69.
42	.653E+06	.21AE+06	.253E-01	.845E-02	4.	73.
45	.980E+06	.327E+06	.468E-01	.156E-01	7.	79.
60	.398E+06	.199E+05	.450E-01	.225E-02	7.	86.
80	.132E+06	.660E+04	.354E-01	.177E-02	5.	92.
100	.217E+05	.10AE+04	.114E-01	.568E-03	2.	94.
120	.159E+05	.797E+03	.144E-01	.722E-03	2.	96.
140	.692E+04	.346E+03	.994E-02	.497E-03	2.	98.
160	.000E+00	.000E+00	.000E+00	.000E+00	0.	98.
180	.254E+04	.127E+03	.776E-02	.388E-03	1.	99.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	99.
220	.14AE+04	.741E+02	.A26E-02	.413E-03	1.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .512 CPS LWC(GM-3)= .180

ASP COUNTS(CC-1)= 291. CPS COUNTS(LIT-1)= 0.

.64 GRAMS PER CUBIC METER @ 29. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 318

2/ 6/80
TAPE # 110
FLIGHT # 10
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 9. GPM
SAMPLE TIME 1421:58

DIAMETER	NUMBER(M-3)	NUMBER(M-3)(U-1)	MASS(GM-3)	MASS(GM-3)(U-1)	PERCENT	CUM PERCENT
3	.261E+07	.871E+06	.369E-04	.123E-04	0.	0.
6	.991E+07	.330E+07	.112E-01	.374E-02	2.	2.
9	.721E+07	.240E+07	.275E-01	.917E-02	6.	8.
12	.465E+07	.155E+07	.421E-01	.140E-01	9.	17.
15	.252E+07	.840E+06	.445E-01	.148E-01	9.	26.
18	.141E+07	.469E+06	.430E-01	.143E-01	9.	34.
21	.869E+06	.290E+06	.421E-01	.140E-01	9.	43.
24	.474E+06	.158E+06	.343E-01	.114E-01	7.	51.
27	.317E+06	.106E+06	.327E-01	.109E-01	7.	57.
30	.238E+06	.795E+05	.337E-01	.112E-01	7.	64.
33	.140E+06	.468E+05	.264E-01	.881E-02	5.	69.
36	.882E+05	.294E+05	.215E-01	.714E-02	4.	73.
39	.457E+05	.152E+05	.142E-01	.474E-02	3.	76.
42	.457E+05	.152E+05	.177E-01	.591E-02	4.	80.
45	.392E+05	.131E+05	.187E-01	.623E-02	4.	84.
60	.307E+05	.154E+04	.348E-01	.174E-02	7.	91.
80	.678E+05	.339E+04	.182E-01	.909E-03	4.	95.
100	.265E+05	.133E+04	.139E-01	.694E-03	3.	97.
120	.709E+04	.354E+03	.641E-02	.321E-03	1.	99.
140	.277E+04	.138E+03	.398E-02	.199E-03	1.	99.
160	.119E+04	.593E+02	.254E-02	.127E-03	1.	100.
180	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .410 CPS LWC(GM-3)= .109

ASP COUNTS(CC-1)= 282. CPS COUNTS(LIT-1)= 3.

.49 GRAMS PER CUBIC METER @ 25. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 318

2/ 6/80
TAPE # 110
FLIGHT # 10
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 8. GPM
SAMPLE TIME 1423:53

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.918E+07	.306E+07	.130E-03	.433E-04	0.	0.
6	.111E+09	.371E+08	.126E-01	.420E-02	2.	2.
9	.818E+08	.273E+08	.312E-01	.104E-01	6.	8.
12	.512E+08	.171E+08	.463E-01	.154E-01	8.	16.
15	.303E+08	.101E+08	.536E-01	.179E-01	10.	26.
18	.180E+08	.600E+07	.550E-01	.183E-01	10.	36.
21	.111E+08	.371E+07	.540E-01	.180E-01	10.	46.
24	.591E+07	.197E+07	.428E-01	.143E-01	8.	53.
27	.408E+07	.136E+07	.421E-01	.140E-01	8.	61.
30	.186E+07	.621E+06	.263E-01	.877E-02	5.	66.
33	.160E+07	.534E+06	.301E-01	.100E-01	5.	71.
36	.118E+07	.392E+06	.287E-01	.95RE-02	5.	77.
39	.588E+06	.196E+06	.183E-01	.609E-02	3.	80.
42	.653E+06	.218E+06	.253E-01	.845E-02	5.	84.
45	.425E+06	.142E+06	.203E-01	.675E-02	4.	88.
60	.265E+06	.133E+05	.300E-01	.150E-02	5.	93.
80	.642E+05	.321E+04	.172E-01	.861E-03	3.	97.
100	.145E+05	.723E+03	.757E-02	.379E-03	1.	98.
120	.354E+04	.177E+03	.321E-02	.160E-03	1.	99.
140	.553E+04	.277E+03	.795E-02	.398E-03	1.	100.
160	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
180	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .487 CPS LWC(GM-3)= .100

ASP COUNTS(CC-1)= 329. CPS COUNTS(LIT-1)= 3.

.55 GRAMS PER CUBIC METER @ 24. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 31R

27 6/80
TAPE # 110
FLIGHT # 10
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 7. GPM
SAMPLE TIME 1425:55

DIAMETER	NUMBER(M=3)	NUMBER(M=3U=1)	MASS(GM=3)	MASS(GM=3U=1)	PERCENT	CUM PERCENT
3	.235E+08	.783E+07	.332E-03	.111E-03	0.	0.
6	.123E+08	.410E+08	.139E-01	.463E-02	3.	3.
9	.87AE+08	.293E+08	.335E-01	.112E-01	6.	9.
12	.515E+08	.172E+08	.466E-01	.155E-01	9.	18.
15	.297E+08	.990E+07	.525E-01	.175E-01	10.	27.
18	.160E+08	.532E+07	.488E-01	.163E-01	9.	37.
21	.974E+07	.325E+07	.472E-01	.157E-01	9.	45.
24	.526E+07	.175E+07	.381E-01	.127E-01	7.	53.
27	.294E+07	.980E+06	.303E-01	.101E-01	6.	58.
30	.170E+07	.566E+06	.240E-01	.801E-02	4.	63.
33	.150E+07	.501E+06	.283E-01	.943E-02	5.	68.
36	.101E+07	.338E+06	.247E-01	.825E-02	5.	73.
39	.586E+06	.196E+06	.183E-01	.609E-02	3.	76.
42	.392E+06	.131E+06	.152E-01	.507E-02	3.	79.
45	.490E+06	.163E+06	.234E-01	.779E-02	4.	83.
60	.313E+06	.157E+05	.354E-01	.177E-02	7.	90.
80	.114E+06	.571E+04	.306E-01	.153E-02	6.	96.
100	.964E+04	.482E+03	.505E-02	.252E-03	1.	97.
120	.106E+05	.532E+03	.962E-02	.481E-03	2.	98.
140	.000E+00	.000E+00	.000E+00	.000E+00	0.	98.
160	.237E+04	.119E+03	.504E-02	.254E-03	1.	99.
180	.127E+04	.635E+02	.388E-02	.194E-03	1.	100.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .445 CPS LWC(GM-3)= .122

ASP COUNTS(CC-1)= 355. CPS COUNTS(LIT-1)= 3.

.53 GRAMS PER CUBIC METER @ 24. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 31H

2/ 6/80
TAPE # 110
FLIGHT # 10
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 6. GPM
SAMPLE TIME 1027:45

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.000E+00	.000E+00	.000E+00	.000E+00	0.	0.
6	.792E+08	.264E+08	.895E-02	.298E-02	2.	2.
9	.577E+08	.192E+08	.220E-01	.734E-02	6.	8.
12	.362E+08	.121E+08	.328E-01	.109E-01	9.	17.
15	.179E+08	.597E+07	.316E-01	.105E-01	9.	26.
18	.111E+08	.371E+07	.340E-01	.113E-01	9.	35.
21	.684E+07	.229E+07	.333E-01	.111E-01	9.	44.
24	.350E+07	.117E+07	.253E-01	.843E-02	7.	51.
27	.234E+07	.780E+06	.242E-01	.808E-02	7.	58.
30	.124E+07	.414E+06	.175E-01	.585E-02	5.	63.
33	.882E+06	.294E+06	.166E-01	.553E-02	5.	67.
36	.425E+06	.142E+06	.104E-01	.346E-02	3.	70.
39	.131E+06	.436E+05	.406E-02	.135E-02	1.	71.
42	.163E+06	.544E+05	.634E-02	.211E-02	2.	73.
45	.131E+06	.436E+05	.623E-02	.208E-02	2.	74.
60	.127E+06	.633E+04	.143E-01	.716E-03	4.	78.
80	.821E+05	.410E+04	.220E-01	.110E-02	6.	84.
100	.313E+05	.157E+04	.164E-01	.820E-03	4.	88.
120	.195E+05	.975E+03	.176E-01	.882E-03	5.	94.
140	.553E+04	.277E+03	.795E-02	.398E-03	2.	96.
160	.356E+04	.178E+03	.763E-02	.381E-03	2.	98.
180	.254E+04	.127E+03	.776E-02	.388E-03	2.	100.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .273 CPS LWC(GM-3)= .110

ASP COUNTS(CC-1)= 218. CPS COUNTS(LIT-1)= 1.

.37 GRAMS PER CUBIC METER @ 25. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 31A

2/ 6/80
TAPE # 110
FLIGHT # 10
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 5. GPM
SAMPLE TIME 1431: 5

DIAMETER	NUMBER(M-3)	NUMBER(M-3)(-1)	MASS(GM-3)	MASS(GM-3)(-1)	PERCENT	CUM PERCENT
3	.187E+08	.622E+07	.264E-03	.879E-04	0.	0.
6	.106E+09	.353E+08	.120E-01	.399E-02	3.	3.
9	.648E+08	.216E+08	.248E-01	.825E-02	6.	8.
12	.357E+08	.119E+08	.323E-01	.108E-01	7.	15.
15	.203E+08	.676E+07	.359E-01	.120E-01	8.	23.
18	.111E+08	.371E+07	.340E-01	.113E-01	8.	31.
21	.673E+07	.224E+07	.326E-01	.109E-01	7.	38.
24	.323E+07	.108E+07	.234E-01	.780E-02	5.	43.
27	.147E+07	.490E+06	.152E-01	.505E-02	3.	47.
30	.980E+06	.327E+06	.139E-01	.462E-02	3.	50.
33	.751E+06	.250E+06	.141E-01	.471E-02	3.	53.
36	.523E+06	.174E+06	.128E-01	.426E-02	3.	56.
39	.425E+06	.142E+06	.132E-01	.440E-02	3.	59.
42	.457E+06	.152E+06	.177E-01	.591E-02	4.	63.
45	.294E+06	.980E+05	.140E-01	.468E-02	3.	66.
60	.175E+06	.874E+04	.198E-01	.988E-03	4.	70.
80	.678E+05	.339E+04	.182E-01	.909E-03	4.	74.
100	.265E+05	.133E+04	.139E-01	.694E-03	3.	77.
120	.195E+05	.975E+03	.176E-01	.882E-03	4.	81.
140	.553E+04	.277E+03	.795E-02	.398E-03	2.	83.
160	.711E+04	.356E+03	.153E-01	.763E-03	3.	87.
180	.381E+04	.191E+03	.116E-01	.582E-03	3.	89.
200	.137E+04	.684E+02	.573E-02	.286E-03	1.	90.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	90.
240	.162E+04	.808E+02	.117E-01	.585E-03	3.	93.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	93.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	93.
300	.222E+04	.111E+03	.314E-01	.157E-02	7.	100.

ASP LWC(GM-3)= .296 CPS LWC(GM-3)= .176

ASP COUNTS(CC-1)= 271. CPS COUNTS(LIT-1)= 2.

.45 GRAMS PER CUBIC METER @ 32. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 318

2/ 8/80
TAPE # 112
FLIGHT # 12
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 12. GPM
SAMPLE TIME 957: 1

DIAMETER	NUMBER(M-3)	NUMBER(M-3)(M-1)	MASS(GM-3)	MASS(GM-3)(M-1)	PERCENT	CUM PERCENT
3	.183E+04	.609E+07	.258E-03	.861E-04	0.	0.
6	.151E+09	.504E+08	.171E-01	.570E-02	2.	2.
9	.110E+09	.368E+08	.444E-01	.148E-01	6.	9.
12	.683E+08	.228E+08	.618E-01	.206E-01	9.	17.
15	.374E+08	.125E+08	.660E-01	.220E-01	9.	27.
18	.226E+08	.754E+07	.690E-01	.230E-01	10.	37.
21	.133E+08	.444E+07	.646E-01	.215E-01	9.	46.
24	.631E+07	.210E+07	.456E-01	.152E-01	6.	52.
27	.314E+07	.105E+07	.323E-01	.108E-01	5.	57.
30	.209E+07	.697E+06	.296E-01	.985E-02	4.	61.
33	.183E+07	.610E+06	.344E-01	.115E-01	5.	66.
36	.915E+06	.305E+06	.223E-01	.745E-02	3.	69.
39	.621E+06	.207E+06	.193E-01	.643E-02	3.	72.
42	.588E+06	.196E+06	.228E-01	.760E-02	3.	75.
45	.392E+06	.131E+06	.187E-01	.623E-02	3.	78.
60	.362E+06	.181E+05	.409E-01	.204E-02	6.	83.
80	.161E+06	.803E+04	.430E-01	.215E-02	6.	89.
100	.506E+05	.253E+04	.265E-01	.133E-02	4.	93.
120	.177E+05	.886E+03	.160E-01	.802E-03	2.	95.
140	.125E+05	.623E+03	.179E-01	.894E-03	3.	98.
160	.237E+04	.119E+03	.508E-02	.254E-03	1.	99.
180	.127E+04	.635E+02	.388E-02	.194E-03	1.	99.
200	.137E+04	.686E+02	.573E-02	.286E-03	1.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .548 CPS LWC(GM-3)= .201

ASP COUNTS(CC-1)= 443. CPS COUNTS(LIT-1)= 4.

.71 GRAMS PER CUBIC METER @ 24. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUN-1M 31A

27 8/80
TAPE # 112
FLIGHT # 12
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 14. GPM
SAMPLE TIME 951:52

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.146E+08	.486E+07	.206E-03	.687E-04	0.	0.
6	.159E+09	.531E+08	.180E-01	.600E-02	2.	2.
9	.127E+09	.422E+08	.483E-01	.161E-01	6.	8.
12	.787E+08	.262E+08	.712E-01	.237E-01	8.	16.
15	.459E+08	.153E+08	.811E-01	.270E-01	9.	25.
18	.282E+08	.939E+07	.860E-01	.287E-01	10.	35.
21	.180E+08	.629E+07	.916E-01	.305E-01	10.	45.
24	.902E+07	.301E+07	.653E-01	.218E-01	7.	53.
27	.546E+07	.182E+07	.562E-01	.187E-01	6.	59.
30	.323E+07	.108E+07	.457E-01	.152E-01	5.	64.
33	.284E+07	.947E+06	.535E-01	.178E-01	6.	71.
36	.137E+07	.457E+06	.335E-01	.112E-01	4.	74.
39	.118E+07	.392E+06	.365E-01	.122E-01	4.	79.
42	.588E+06	.196E+06	.228E-01	.760E-02	3.	81.
45	.555E+06	.185E+06	.265E-01	.883E-02	3.	84.
60	.313E+06	.157E+05	.354E-01	.177E-02	4.	88.
80	.143E+06	.714E+04	.383E-01	.191E-02	4.	93.
100	.530E+05	.265E+04	.278E-01	.139E-02	3.	96.
120	.106E+05	.532E+03	.962E-02	.481E-03	1.	97.
140	.553E+04	.277E+03	.795E-02	.398E-03	1.	98.
160	.237E+04	.119E+03	.507E-02	.254E-03	1.	98.
180	.254E+04	.127E+03	.776E-02	.388E-03	1.	99.
200	.137E+04	.684E+02	.573E-02	.286E-03	1.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .736 CPS LWC(GM-3)= .179

ASP COUNTS(CC-1)= 496. CPS COUNTS(LIT-1)= 4.

.87 GRAMS PER CUBIC METER @ 24. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUN-IN 318

21 8/80
TAPE # 112
FLIGHT # 12
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 1o. GPM
SAMPLE TIME 947:53

DIAMETER	NUMBER(M=3)	NUMBER(M=3U=1)	MASS(GM=3)	MASS(GM=3U=1)	PERCENT	CUM PERCENT
3	.235E+07	.784E+06	.333E-04	.111E-04	0.	0.
6	.120E+09	.400E+08	.136E-01	.452E-02	1.	1.
9	.941E+08	.314E+08	.359E-01	.120E-01	4.	5.
12	.600E+08	.200E+08	.543E-01	.181E-01	6.	11.
15	.377E+08	.126E+08	.666E-01	.222E-01	7.	18.
18	.237E+08	.789E+07	.723E-01	.241E-01	8.	26.
21	.164E+08	.548E+07	.797E-01	.266E-01	9.	35.
24	.817E+07	.272E+07	.591E-01	.197E-01	6.	41.
27	.546E+07	.182E+07	.562E-01	.187E-01	6.	47.
30	.340E+07	.113E+07	.480E-01	.160E-01	5.	52.
33	.242E+07	.806E+06	.455E-01	.152E-01	5.	57.
36	.147E+07	.490E+06	.359E-01	.120E-01	4.	61.
39	.915E+06	.305E+06	.284E-01	.947E-02	3.	64.
42	.915E+06	.305E+06	.355E-01	.118E-01	4.	68.
45	.621E+06	.207E+06	.296E-01	.987E-02	3.	71.
60	.687E+06	.343E+05	.777E-01	.388E-02	8.	80.
80	.246E+06	.123E+05	.660E-01	.330E-02	7.	87.
100	.795E+05	.398E+04	.416E-01	.208E-02	4.	91.
120	.319E+05	.159E+04	.289E-01	.144E-02	3.	94.
140	.111E+05	.553E+03	.159E-01	.795E-03	2.	96.
160	.711E+04	.356E+03	.153E-01	.763E-03	2.	98.
180	.254E+04	.127E+03	.776E-02	.388E-03	1.	98.
200	.137E+04	.684E+02	.573E-02	.286E-03	1.	99.
220	.148E+04	.741E+02	.826E-02	.413E-03	1.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .661 CPS LWC(GM-3)= .336

ASP COUNTS(CC-1)= 378. CPS COUNTS(L11-1)= 6.

.93 GRAMS PER CUBIC METER @ 30. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 31A

2/11/80
TAPE # 113
FLIGHT # 13
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 5. GPM
SAMPLE TIME 844:52

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.570E+08	.190E+08	.806E-03	.269E-03	0.	0.
6	.183E+09	.609E+08	.206E-01	.688E-02	6.	6.
9	.109E+09	.363E+08	.415E-01	.138E-01	12.	18.
12	.508E+08	.169E+08	.460E-01	.153E-01	13.	32.
15	.220E+08	.733E+07	.389E-01	.130E-01	11.	43.
18	.117E+08	.389E+07	.356E-01	.119E-01	10.	53.
21	.624E+07	.208E+07	.303E-01	.101E-01	9.	62.
24	.287E+07	.958E+06	.208E-01	.694E-02	6.	68.
27	.137E+07	.457E+06	.141E-01	.471E-02	4.	72.
30	.751E+06	.250E+06	.106E-01	.354E-02	3.	75.
33	.621E+06	.207E+06	.117E-01	.389E-02	3.	79.
36	.327E+06	.109E+06	.798E-02	.266E-02	2.	81.
39	.980E+05	.327E+05	.304E-02	.101E-02	1.	82.
42	.163E+06	.544E+05	.634E-02	.211E-02	2.	84.
45	.163E+06	.544E+05	.779E-02	.260E-02	2.	86.
60	.139E+06	.693E+04	.157E-01	.784E-03	5.	90.
80	.392E+05	.196E+04	.105E-01	.526E-03	3.	93.
100	.964E+04	.482E+03	.505E-02	.252E-03	1.	95.
120	.354E+04	.177E+03	.321E-02	.160E-03	1.	96.
140	.277E+04	.138E+03	.398E-02	.199E-03	1.	97.
160	.119E+04	.593E+02	.254E-02	.127E-03	1.	98.
180	.254E+04	.127E+03	.776E-02	.388E-03	2.	100.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .296 CPS LWC(GM-3)= .065

ASP COUNTS(CC-1)= 445. CPS COUNTS(LIT-1)= 2.

.34 GRAMS PER CUBIC METER @ 19. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 318

2/11/80
TAPE # 113
FLIGHT # 13
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 6. GPM
SAMPLE TIME 848:43

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.421E+08	.140E+08	.595E-03	.198E-03	0.	0.
6	.166E+09	.553E+08	.188E-01	.626E-02	4.	5.
9	.106E+09	.354E+08	.405E-01	.135E-01	10.	14.
12	.526E+08	.175E+08	.476E-01	.159E-01	11.	26.
15	.261E+08	.870E+07	.461E-01	.154E-01	11.	37.
18	.138E+08	.460E+07	.421E-01	.140E-01	10.	47.
21	.693E+07	.231E+07	.336E-01	.112E-01	8.	55.
24	.291E+07	.969E+06	.210E-01	.702E-02	5.	60.
27	.183E+07	.610E+06	.189E-01	.628E-02	5.	64.
30	.111E+07	.370E+06	.157E-01	.523E-02	4.	68.
33	.751E+06	.250E+06	.141E-01	.471E-02	3.	72.
36	.490E+06	.163E+06	.120E-01	.399E-02	3.	74.
39	.294E+06	.980E+05	.913E-02	.304E-02	2.	77.
42	.261E+06	.871E+05	.101E-01	.338E-02	2.	79.
45	.980E+05	.327E+05	.468E-02	.156E-02	1.	80.
60	.145E+06	.723E+04	.164E-01	.818E-03	4.	84.
80	.714E+05	.357E+04	.191E-01	.956E-03	5.	89.
100	.217E+05	.108E+04	.114E-01	.568E-03	3.	91.
120	.709E+04	.354E+03	.641E-02	.321E-03	2.	93.
140	.692E+04	.346E+03	.994E-02	.497E-03	2.	95.
160	.119E+04	.593E+02	.254E-02	.127E-03	1.	96.
180	.000E+00	.000E+00	.000E+00	.000E+00	0.	96.
200	.137E+04	.684E+02	.573E-02	.286E-03	1.	97.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	97.
240	.162E+04	.808E+02	.117E-01	.585E-03	3.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .335 CPS LWC(GM-3)= .102

ASP COUNTS(CC-1)= 421. CPS COUNTS(LIT-1)= 2.

.42 GRAMS PER CUBIC METER @ 21. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 318

2/11/80
TAPE # 113
FLIGHT # 13
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 7. GPM
SAMPLE TIME 850:42

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.345E+08	.115E+08	.488E-03	.163E-03	0.	0.
6	.176E+09	.585E+08	.199E-01	.662E-02	4.	4.
9	.125E+09	.418E+08	.479E-01	.160E-01	9.	13.
12	.652E+08	.217E+08	.590E-01	.197E-01	11.	24.
15	.317E+08	.106E+08	.559E-01	.186E-01	11.	35.
18	.169E+08	.562E+07	.515E-01	.172E-01	10.	45.
21	.102E+08	.340E+07	.494E-01	.165E-01	9.	54.
24	.523E+07	.174E+07	.378E-01	.126E-01	7.	62.
27	.261E+07	.871E+06	.269E-01	.898E-02	5.	67.
30	.176E+07	.588E+06	.249E-01	.831E-02	5.	71.
33	.849E+06	.283E+06	.160E-01	.533E-02	3.	74.
36	.719E+06	.240E+06	.176E-01	.585E-02	3.	78.
39	.555E+06	.185E+06	.172E-01	.575E-02	3.	81.
42	.392E+06	.131E+06	.152E-01	.507E-02	3.	84.
45	.261E+06	.871E+05	.125E-01	.416E-02	2.	86.
60	.211E+06	.105E+05	.239E-01	.119E-02	5.	91.
80	.642E+05	.321E+04	.172E-01	.861E-03	3.	94.
100	.169E+05	.844E+03	.883E-02	.442E-03	2.	96.
120	.177E+05	.886E+03	.160E-01	.802E-03	3.	99.
140	.000E+00	.000E+00	.000E+00	.000E+00	0.	99.
160	.237E+04	.119E+03	.508E-02	.254E-03	1.	100.
180	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .452 CPS LWC(GM-3)= .089

ASP COUNTS(CC-1)= 472. CPS COUNTS(LIT-1)= 2.

.52 GRAMS PER CUBIC METER @ 21. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 318

2/11/80
TAPE # 113
FLIGHT # 13
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 8. GPM
SAMPLE TIME 854:40

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.244E+08	.813E+07	.345E-03	.115E-03	0.	0.
6	.151E+09	.503E+06	.171E-01	.569E-02	3.	3.
9	.118E+09	.393E+08	.450E-01	.150E-01	8.	11.
12	.649E+08	.216E+08	.588E-01	.196E-01	11.	22.
15	.348E+08	.116E+08	.615E-01	.205E-01	11.	33.
18	.184E+08	.613E+07	.562E-01	.187E-01	10.	44.
21	.101E+08	.335E+07	.488E-01	.163E-01	9.	53.
24	.490E+07	.163E+07	.355E-01	.118E-01	6.	59.
27	.317E+07	.106E+07	.327E-01	.109E-01	6.	65.
30	.163E+07	.544E+06	.231E-01	.770E-02	4.	69.
33	.915E+06	.305E+06	.172E-01	.574E-02	3.	72.
36	.784E+06	.261E+06	.192E-01	.638E-02	3.	76.
39	.621E+06	.207E+06	.193E-01	.643E-02	4.	79.
42	.425E+06	.142E+06	.165E-01	.549E-02	3.	82.
45	.261E+06	.871E+05	.125E-01	.416E-02	2.	85.
60	.199E+06	.994E+04	.225E-01	.112E-02	4.	89.
80	.535E+05	.268E+04	.143E-01	.717E-03	3.	91.
100	.265E+05	.133E+04	.139E-01	.694E-03	3.	94.
120	.142E+05	.709E+03	.128E-01	.641E-03	2.	96.
140	.553E+04	.277E+03	.795E-02	.398E-03	1.	98.
160	.237E+04	.119E+03	.508E-02	.254E-03	1.	99.
180	.254E+04	.127E+03	.776E-02	.388E-03	1.	100.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .463 CPS LWC(GM-3)= .105

ASP COUNTS(CC-1)= 434. CPS COUNTS(LIT-1)= 2.

.55 GRAMS PER CUBIC METER @ 22. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUN-IH 318

2/11/80
TAPE # 115
FLIGHT # 13
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 9. GPM
SAMPLE TIME 857:32

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.189E+08	.632E+07	.268E-03	.893E-04	0.	0.
6	.135E+09	.451E+08	.153E-01	.510E-02	3.	3.
9	.104E+09	.348E+08	.398E-01	.133E-01	8.	11.
12	.623E+08	.206E+08	.564E-01	.188E-01	11.	21.
15	.339E+08	.113E+08	.600E-01	.200E-01	11.	33.
18	.197E+08	.656E+07	.601E-01	.200E-01	11.	44.
21	.121E+08	.403E+07	.586E-01	.195E-01	11.	56.
24	.542E+07	.181E+07	.393E-01	.131E-01	8.	63.
27	.330E+07	.110E+07	.340E-01	.113E-01	7.	70.
30	.167E+07	.555E+06	.236E-01	.785E-02	5.	74.
33	.105E+07	.348E+06	.197E-01	.656E-02	4.	78.
36	.653E+06	.218E+06	.160E-01	.532E-02	3.	81.
39	.457E+06	.152E+06	.142E-01	.474E-02	3.	84.
42	.392E+06	.131E+06	.152E-01	.507E-02	3.	87.
45	.425E+06	.142E+06	.203E-01	.675E-02	4.	90.
60	.205E+06	.102E+05	.232E-01	.116E-02	4.	95.
80	.535E+05	.268E+04	.143E-01	.717E-03	3.	98.
100	.482E+04	.241E+03	.252E-02	.126E-03	0.	98.
120	.000E+00	.000E+00	.000E+00	.000E+00	0.	98.
140	.134E+04	.692E+02	.199E-02	.994E-04	0.	98.
160	.000E+00	.000E+00	.000E+00	.000E+00	0.	98.
180	.000E+00	.000E+00	.000E+00	.000E+00	0.	98.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	98.
220	.144E+04	.741E+02	.826E-02	.413E-03	2.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .473 CPS LWC(GM-3)= .081

ASP COUNTS(CC-1)= 400. CPS COUNTS(LIT-1)= 3.

.52 GRAMS PER CUBIC METER @ 21. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 31R

2/11/80
TAPE # 113
FLIGHT # 13
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 10. GPM
SAMPLE TIME 9 0:56

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.106E+08	.355E+07	.151E-03	.502E-04	0.	0.
6	.117E+09	.390E+08	.132E-01	.441E-02	2.	2.
9	.101E+09	.335E+08	.384E-01	.128E-01	7.	9.
12	.633E+08	.211E+08	.573E-01	.191E-01	10.	19.
15	.363E+08	.121E+08	.641E-01	.214E-01	11.	29.
18	.214E+08	.713E+07	.653E-01	.218E-01	11.	40.
21	.131E+08	.436E+07	.634E-01	.211E-01	11.	51.
24	.585E+07	.195E+07	.423E-01	.141E-01	7.	58.
27	.323E+07	.108E+07	.333E-01	.111E-01	6.	64.
30	.212E+07	.708E+06	.300E-01	.100E-01	5.	69.
33	.131E+07	.436E+06	.246E-01	.820E-02	4.	73.
36	.915E+06	.305E+06	.223E-01	.745E-02	4.	77.
39	.490E+06	.163E+06	.152E-01	.507E-02	3.	80.
42	.425E+06	.142E+06	.165E-01	.549E-02	3.	83.
45	.425E+06	.142E+06	.203E-01	.675E-02	3.	86.
60	.265E+06	.133E+05	.300E-01	.150E-02	5.	91.
80	.963E+05	.482E+04	.258E-01	.129E-02	4.	95.
100	.121E+05	.603E+03	.631E-02	.315E-03	1.	97.
120	.142E+05	.709E+03	.128E-01	.641E-03	2.	99.
140	.000E+00	.000E+00	.000E+00	.000E+00	0.	99.
160	.356E+04	.178E+03	.763E-02	.381E-03	1.	100.
180	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .506 CPS LWC(GM-3)= .118

ASP COUNTS(CC-1)= 377. CPS COUNTS(LIT-1)= 4.

.59 GRAMS PER CUBIC METER @ 22. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 318

2/11/80
TAPE # 113
FLIGHT # 13
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 12. GPM
SAMPLE TIME 9 3:24

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.124E+08	.415E+07	.176E-03	.587E-04	0.	0.
6	.150E+09	.500E+08	.170E-01	.565E-02	2.	2.
9	.130E+09	.434E+08	.497E-01	.166E-01	7.	10.
12	.748E+08	.249E+08	.677E-01	.226E-01	10.	19.
15	.451E+08	.150E+08	.796E-01	.265E-01	11.	31.
18	.251E+08	.836E+07	.766E-01	.255E-01	11.	42.
21	.144E+08	.481E+07	.700E-01	.233E-01	10.	52.
24	.709E+07	.236E+07	.513E-01	.171E-01	7.	60.
27	.464E+07	.155E+07	.476E-01	.159E-01	7.	66.
30	.242E+07	.806E+06	.342E-01	.114E-01	5.	71.
33	.167E+07	.555E+06	.314E-01	.105E-01	5.	76.
36	.111E+07	.370E+06	.271E-01	.904E-02	4.	80.
39	.719E+06	.240E+06	.223E-01	.744E-02	3.	83.
42	.555E+06	.185E+06	.215E-01	.718E-02	3.	86.
45	.359E+06	.120E+06	.171E-01	.572E-02	2.	89.
60	.289E+06	.145E+05	.327E-01	.164E-02	5.	93.
80	.749E+05	.375E+04	.201E-01	.100E-02	3.	96.
100	.241E+05	.121E+04	.126E-01	.631E-03	2.	98.
120	.354E+04	.177E+03	.321E-02	.160E-03	0.	99.
140	.138E+04	.692E+02	.199E-02	.994E-04	0.	99.
160	.119E+04	.593E+02	.254E-02	.127E-03	0.	99.
180	.000E+00	.000E+00	.000E+00	.000E+00	0.	99.
200	.137E+04	.684E+02	.573E-02	.286E-03	1.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .614 CPS LWC(GM-3)= .125

ASP COUNTS(CC-1)= 470. CPS COUNTS(LIT-1)= 4.

.69 GRAMS PER CUBIC METER @ 22. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 318

2/11/80
TAPE # 113
FLIGHT # 13
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 14. GPM
SAMPLE TIME 9 6:46

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.611E+07	.204E+07	.864E-04	.288E-04	0.	0.
6	.159E+09	.530E+08	.180E-01	.599E-02	2.	2.
9	.138E+09	.459E+08	.526E-01	.175E-01	6.	9.
12	.829E+08	.276E+08	.750E-01	.250E-01	9.	18.
15	.470E+08	.157E+08	.831E-01	.277E-01	10.	28.
18	.285E+08	.950E+07	.870E-01	.290E-01	11.	39.
21	.170E+08	.566E+07	.824E-01	.275E-01	10.	49.
24	.719E+07	.240E+07	.520E-01	.173E-01	6.	55.
27	.523E+07	.174E+07	.539E-01	.180E-01	7.	62.
30	.291E+07	.969E+06	.411E-01	.137E-01	5.	67.
33	.216E+07	.719E+06	.406E-01	.135E-01	5.	72.
36	.124E+07	.414E+06	.303E-01	.101E-01	4.	76.
39	.849E+06	.283E+06	.264E-01	.879E-02	3.	79.
42	.817E+06	.272E+06	.317E-01	.106E-01	4.	83.
45	.686E+06	.229E+06	.327E-01	.109E-01	4.	87.
60	.386E+06	.193E+05	.436E-01	.218E-02	5.	92.
80	.128E+06	.642E+04	.344E-01	.172E-02	4.	96.
100	.241E+05	.121E+04	.126E-01	.631E-03	2.	98.
120	.532E+04	.266E+03	.481E-02	.241E-03	1.	98.
140	.553E+04	.277E+03	.795E-02	.398E-03	1.	99.
160	.237E+04	.119E+03	.508E-02	.254E-03	1.	100.
180	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .707 CPS LWC(GM-3)= .162

ASP COUNTS(CC-1)= 499. CPS COUNTS(LIT-1)= 5.

.82 GRAMS PER CUBIC METER @ 23. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

HELICOPTER ICING SPRAY SYSTEM TEST FOR JUH-1H 318

2/11/80
TAPE # 113
FLIGHT # 13
STAND-OFF DISTANCE 150 FEET
WATER FLOW RATE OF 16. GPM
SAMPLE TIME 9 9:47

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.000E+00	.000E+00	.000E+00	.000E+00	0.	0.
6	.124E+09	.412E+08	.140E-01	.466E-02	1.	1.
9	.122E+09	.406E+08	.465E-01	.155E-01	5.	6.
12	.812E+08	.271E+08	.735E-01	.245E-01	8.	14.
15	.482E+08	.161E+08	.852E-01	.284E-01	9.	23.
18	.288E+08	.962E+07	.881E-01	.294E-01	9.	32.
21	.176E+08	.588E+07	.855E-01	.285E-01	9.	41.
24	.908E+07	.303E+07	.657E-01	.219E-01	7.	48.
27	.598E+07	.199E+07	.616E-01	.205E-01	6.	54.
30	.428E+07	.143E+07	.605E-01	.202E-01	6.	60.
33	.291E+07	.969E+06	.547E-01	.182E-01	6.	66.
36	.140E+07	.468E+06	.343E-01	.114E-01	4.	70.
39	.167E+07	.555E+06	.517E-01	.172E-01	5.	75.
42	.947E+06	.316E+06	.368E-01	.123E-01	4.	79.
45	.105E+07	.348E+06	.499E-01	.166E-01	5.	84.
60	.482E+06	.241E+05	.545E-01	.273E-02	6.	90.
80	.189E+06	.945E+04	.507E-01	.253E-02	5.	95.
100	.313E+05	.157E+04	.164E-01	.820E-03	2.	97.
120	.124E+05	.620E+03	.112E-01	.561E-03	1.	98.
140	.692E+04	.346E+03	.994E-02	.497E-03	1.	99.
160	.119E+04	.593E+02	.254E-02	.127E-03	0.	99.
180	.127E+04	.635E+02	.388E-02	.194E-03	0.	99.
200	.137E+04	.684E+02	.573E-02	.286E-03	1.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

ASP LWC(GM-3)= .808 CPS LWC(GM-3)= .203

ASP COUNTS(CC-1)= 448. CPS COUNTS(LIT-1)= 5.

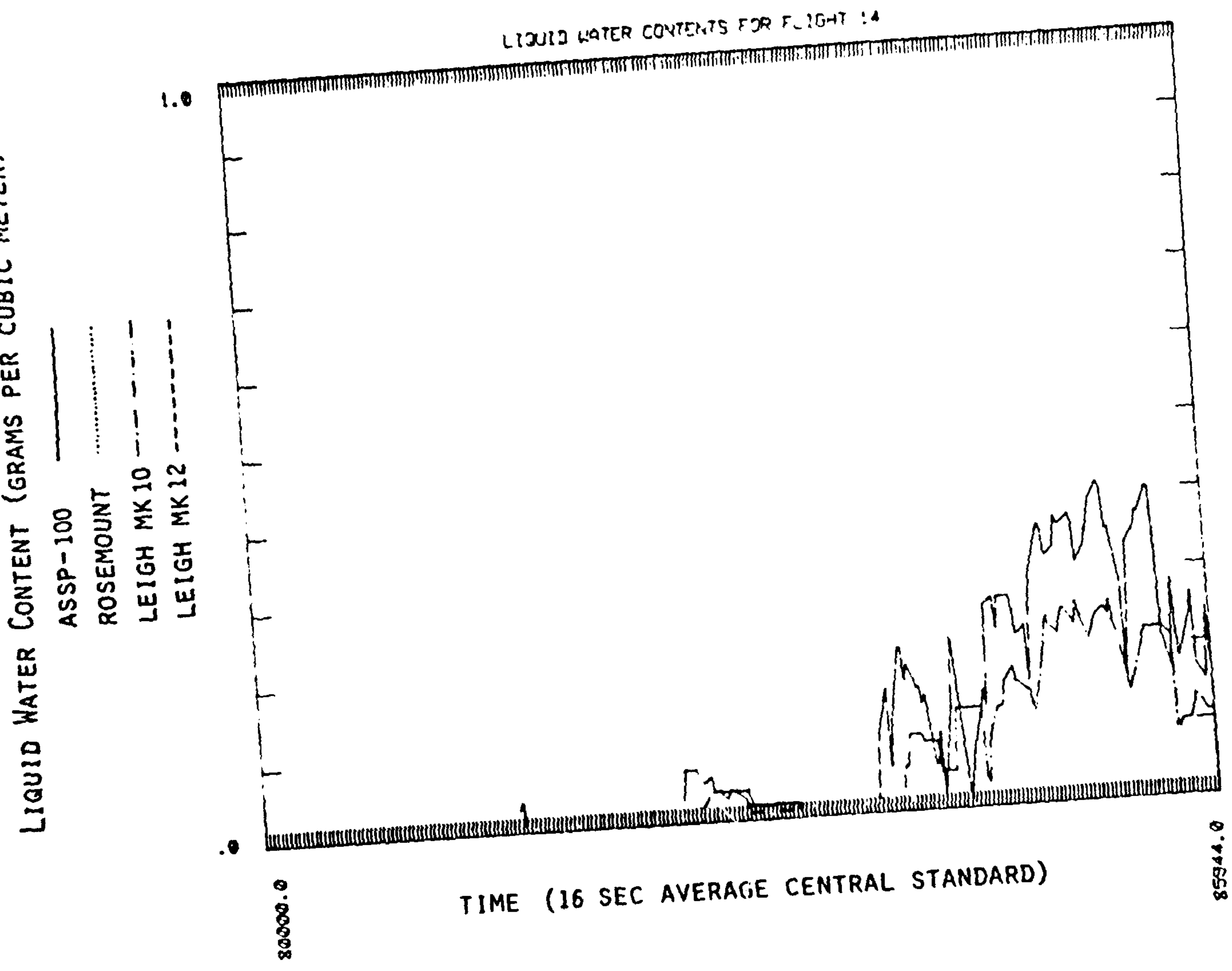
.96 GRAMS PER CUBIC METER @ 27. MICRONS MEDIAN VOLUMETRIC DIAMETER

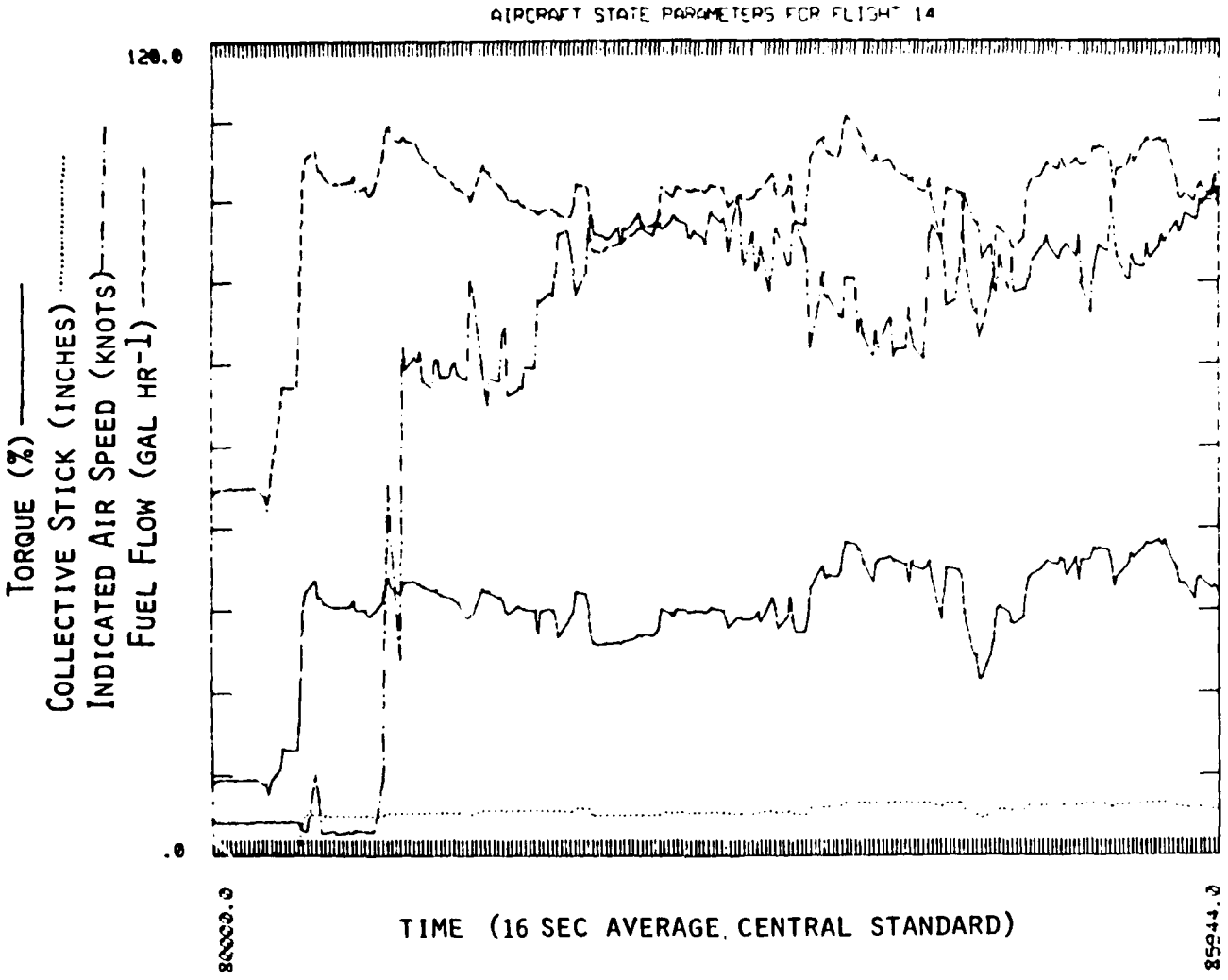
METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

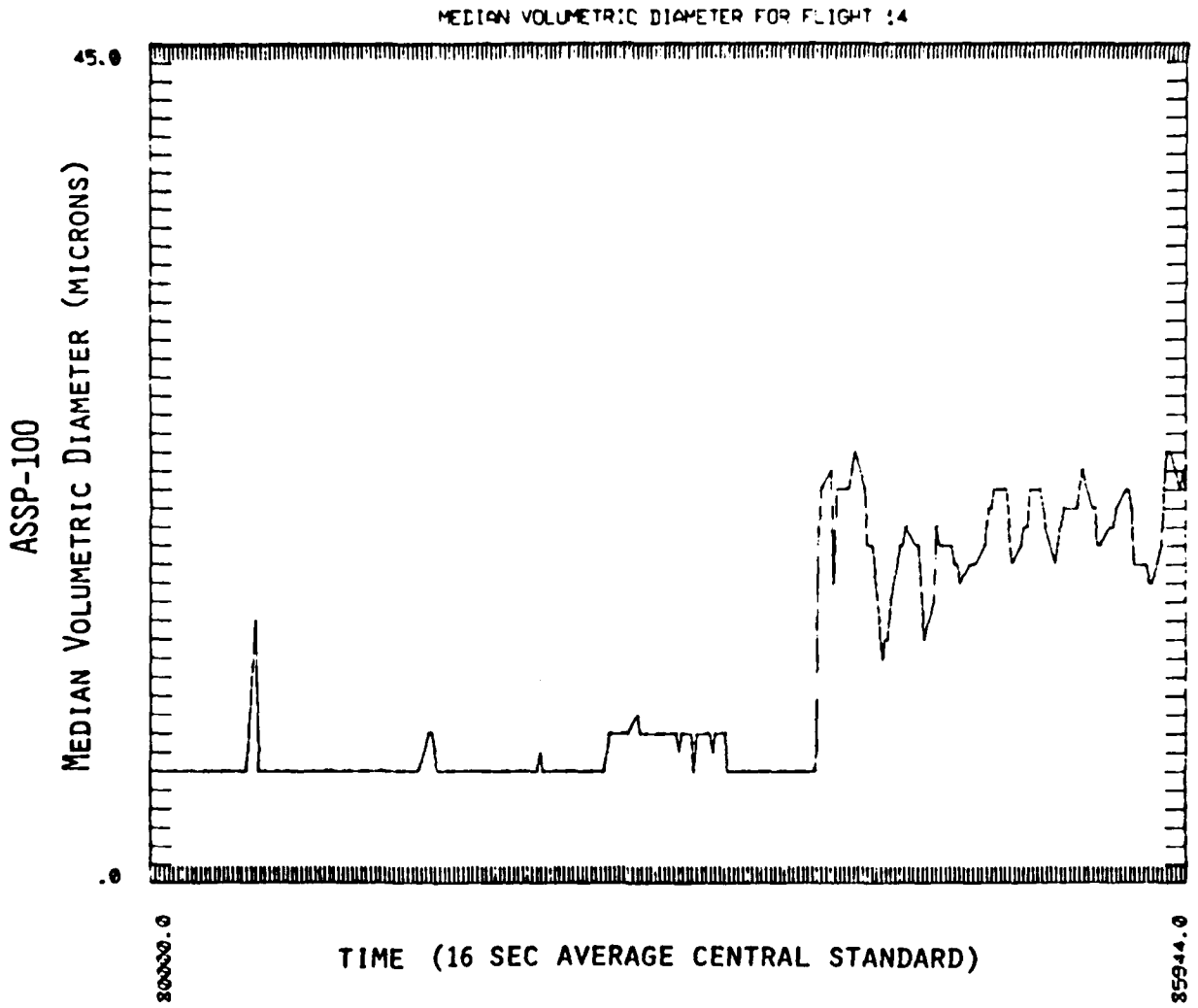
APPENDIX B

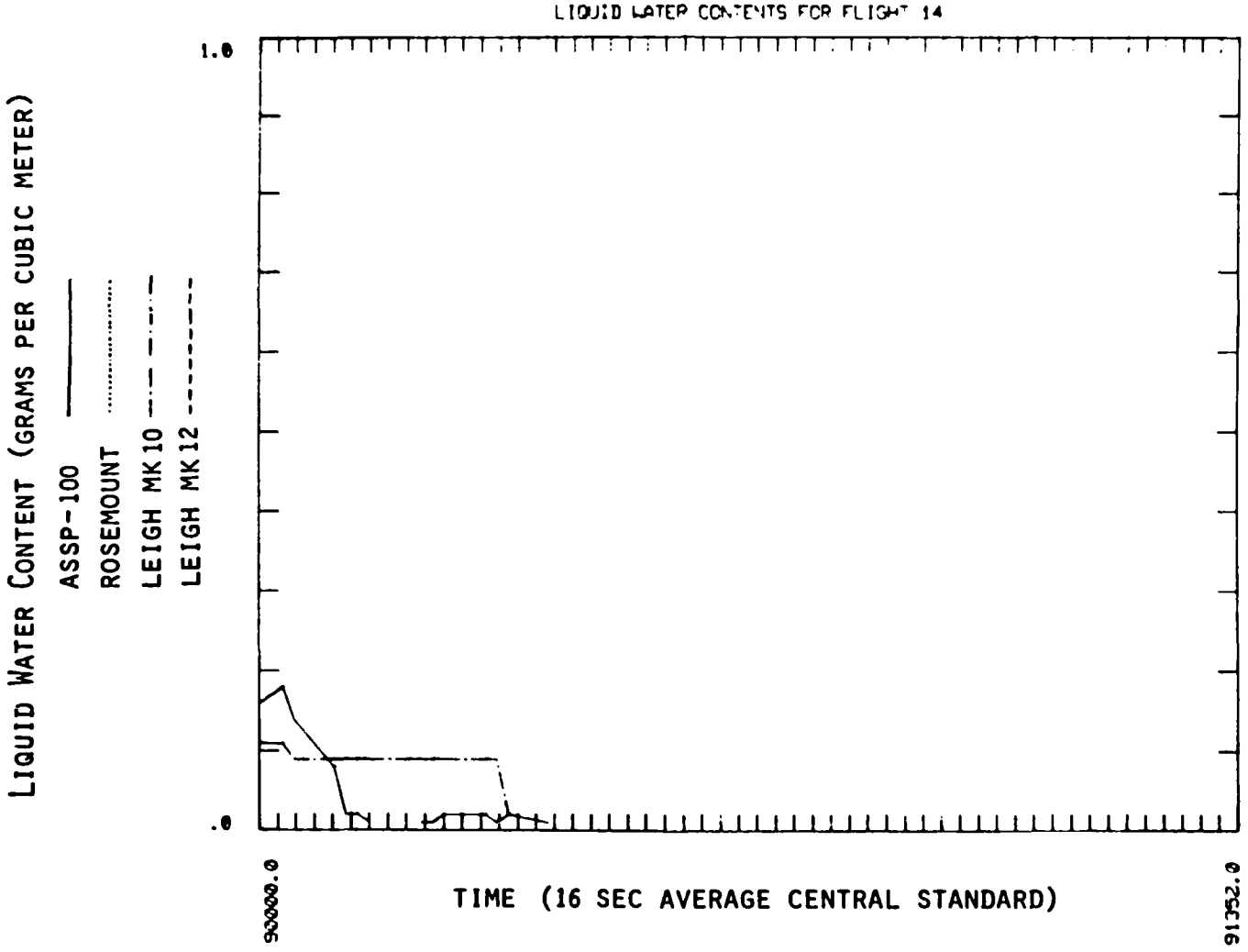
NATURAL ICING

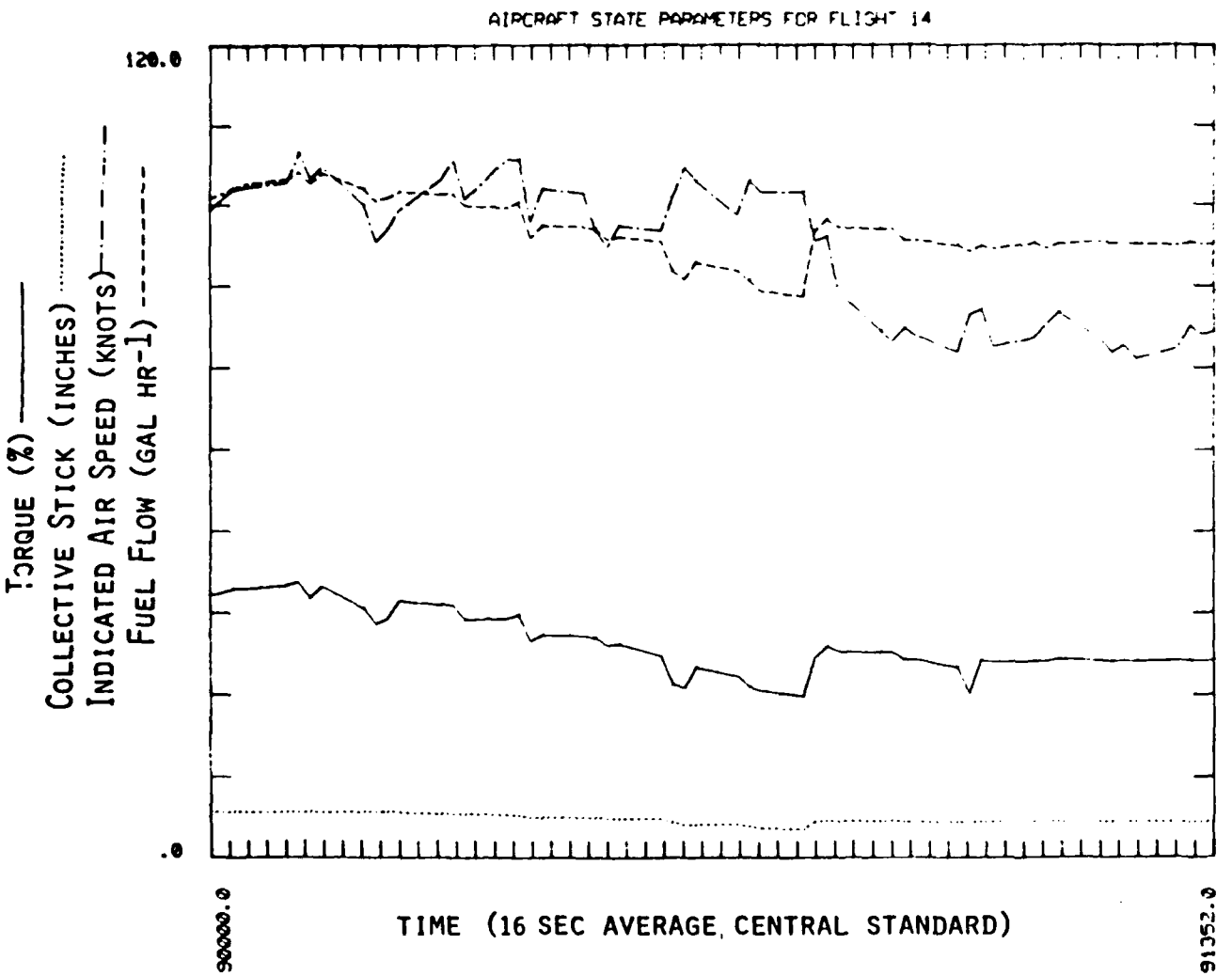
Flight #14
Flight #16
Flight #17
Flight #21
Flight #25
Flight #26
Flight #28

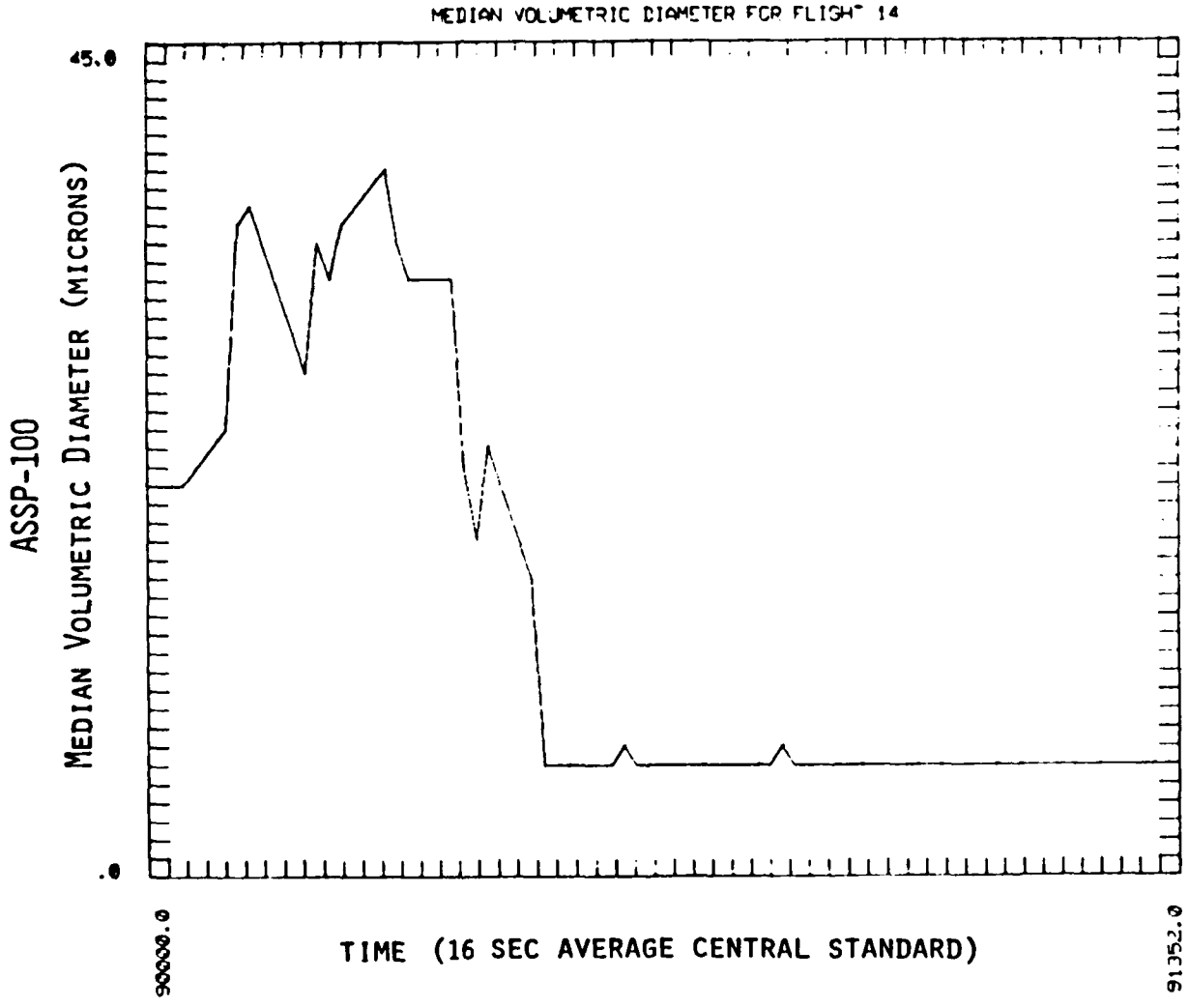

LIQUID WATER CONTENTS FOR FLIGHT 14
LIQUID WATER CONTENT (GRAMS PER CUBIC METER)
ASSP-100
ROSEMOUNT
LEIGH MK10
LEIGH MK12
1.0
.0
80000.0
85944.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)


AIRCRAFT STATE PARAMETERS FOR FLIGHT 14
120.0
.0
TORQUE (%)
COLLECTIVE STICK (INCHES)
INDICATED AIR SPEED (KNOTS)
FUEL FLOW (GAL HR-1)
80000.0
85944.0
TIME (16 SEC AVERAGE, CENTRAL STANDARD)


MEDIAN VOLUMETRIC DIAMETER FOR FLIGHT :4
45.0
.0
ASSP-100
MEDIAN VOLUMETRIC DIAMETER (MICRONS)
80000.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)
85944.0


LIQUID WATER CONTENTS FOR FLIGHT 14
LIQUID WATER CONTENT (GRAMS PER CUBIC METER)
ASSP-100
ROSEMOUNT
LEIGH MK10
LEIGH MK12
1.0
.0
90000.0
91352.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)


AIRCRAFT STATE PARAMETERS FOR FLIGHT 14
120.0
.0
TORQUE (%)
COLLECTIVE STICK (INCHES)
INDICATED AIR SPEED (KNOTS)
FUEL FLOW (GAL HR-1)
90000.0
91352.0
TIME (16 SEC AVERAGE, CENTRAL STANDARD)


MEDIAN VOLUMETRIC DIAMETER FOR FLIGHT 14
45.0
.0
ASSP-100
MEDIAN VOLUMETRIC DIAMETER (MICRONS)
90000.0
91352.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)

DATE: 2/13/80 NATURAL ICING ENCOUNTER FLIGHT 14 TAPE RECORD # 1

TIME (LST)	IRU (CNTS)	MK 10 (G/M3)	MK 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
75336	0.	0.00	0.00	-4.0	0.00	.00	6	3.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
75352	0.	0.00	0.00	-3.8	0.00	.00	6	4.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
754 8	0.	0.00	0.00	-3.8	0.00	.00	6	9.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
75424	0.	0.00	0.00	-4.0	0.00	.00	6	14.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
75440	85.	.19	0.00	-4.1	0.00	.00	6	16.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
75456	60.	.57	.26	-4.0	0.00	.00	6	10.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
75512	0.	.00	.05	-4.1	0.00	.00	6	10.	0	98	1	0	0	0	0	0	0	0	0	0	0	0	0
75528	0.	.00	.03	-2.9	0.00	.00	6	15.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
75544	0.	.00	.03	8.7	0.00	.00	6	20.	0	99	0	0	0	0	0	0	0	0	0	0	0	0	0
756 0	0.	.00	.04	30.9	0.00	.00	6	21.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
75616	0.	.00	.04	53.2	0.00	.00	6	18.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
75632	0.	.00	.04	71.1	0.00	.00	6	19.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
75648	0.	.00	.04	72.2	0.00	.00	6	21.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
757 4	0.	.00	.04	72.2	0.00	.00	6	25.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
75720	0.	.00	.04	72.2	0.00	.00	6	34.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
75736	0.	.00	.04	72.2	0.00	.00	6	32.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
75752	0.	.00	.04	72.2	0.00	.00	6	34.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
758 8	0.	.00	.04	72.2	0.00	.00	6	23.	0	99	0	0	0	0	0	0	0	0	0	0	0	0	0
75824	0.	.00	.04	72.2	0.00	.00	6	28.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
75840	0.	.00	.04	72.1	0.00	.00	6	31.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
75856	0.	.00	.04	72.2	0.00	.00	6	30.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
75912	0.	.00	.04	72.2	0.00	.00	6	29.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
75928	0.	.00	.04	72.3	0.00	.00	6	30.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
75944	0.	.00	.04	72.3	0.00	.00	6	22.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 0 0	0.	.00	.04	72.3	0.00	.00	6	20.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 016	0.	.00	.04	72.3	0.00	.00	6	23.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 032	0.	.00	.04	72.3	0.00	.00	6	21.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 048	0.	.00	.04	72.3	0.00	.00	6	19.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 1 4	0.	.00	.04	72.3	0.00	.00	6	16.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 120	0.	.00	.04	72.3	0.00	.00	6	14.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 136	0.	.00	.04	72.3	0.00	.00	6	12.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 152	0.	.00	.04	72.3	0.00	.00	6	11.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 2 8	0.	.00	.04	72.3	0.00	.00	6	10.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 224	0.	.00	.04	72.3	0.00	.00	6	8.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 240	0.	.00	.04	72.3	0.00	.00	6	9.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 256	0.	.00	.04	72.3	0.00	.00	6	10.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 312	0.	.00	.04	72.3	0.00	.00	6	9.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 328	0.	.00	.05	72.3	0.00	.00	6	9.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 344	0.	.00	.04	72.3	0.00	.00	6	8.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 4 0	0.	.00	.04	72.3	0.00	.00	6	8.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 416	0.	.00	.04	72.3	0.00	.00	6	8.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 432	0.	.00	.04	72.3	0.00	.00	6	6.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 448	0.	.00	.04	72.3	0.00	.00	6	5.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 5 4	0.	.00	.04	72.3	0.00	.00	6	4.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 520	0.	.00	.04	72.3	0.00	.00	6	2.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 536	0.	.00	.04	72.3	0.00	.00	6	1.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 552	0.	.00	.04	72.3	0.00	.00	6	1.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 6 8	0.	.00	.04	72.3	0.00	.00	14	1.	0	25	9	7	15	0	41	0	0	0	0	0	0	0	0
8 624	0.	.00	.03	72.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 640	0.	.00	.03	72.2	0.00	.00	6	1.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0

DATE: 2/13/80 NATURAL ICING ENCOUNTER FLIGHT 14 TAPE RECORD # 51

TIME (LST)	IRU (CNTS)	WK 10 (G/M3)	WK 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
8 656	0.	.00	.03	72.2	0.00	.00	6	2.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 712	0.	.00	.03	72.2	0.00	.00	6	3.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 728	0.	.00	.03	72.2	0.00	.00	6	3.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 744	0.	.00	.03	72.2	0.00	.00	6	4.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 8 0	0.	.00	.03	72.2	0.00	.00	6	4.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 816	0.	.00	.03	72.2	0.00	.00	6	4.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 832	0.	.00	.03	72.2	0.00	.00	6	5.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 848	0.	.00	.03	72.2	0.00	.00	6	4.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 9 4	0.	.00	.03	72.2	0.00	.00	6	3.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 920	0.	.00	.03	72.2	0.00	.00	6	3.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 936	0.	.00	.03	72.2	0.00	.00	6	4.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 952	0.	.00	.03	72.2	0.00	.00	6	3.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
810 8	0.	.00	.03	72.2	0.00	.00	6	2.	0	94	5	0	0	0	0	0	0	0	0	0	0	0	0
81024	0.	.00	.03	45.6	0.00	.00	6	2.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81040	0.	.00	.03	10.0	0.00	.00	6	2.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81056	0.	.00	.03	1.4	0.00	.00	6	2.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81112	0.	.00	.03	-2.1	0.00	.00	6	3.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81128	0.	.00	.02	-3.3	0.00	.00	6	3.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81144	0.	.00	.02	-3.8	0.00	.00	6	4.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
812 0	0.	.00	.02	-4.1	0.00	.00	6	4.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81216	0.	.00	.02	-4.3	0.00	.00	6	3.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81232	0.	.00	.02	-4.5	0.00	.00	6	2.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81248	0.	.00	.02	-4.5	0.00	.00	6	1.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
813 4	0.	.00	.02	-4.6	0.00	.00	6	1.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81320	0.	.00	.02	-4.9	0.00	.00	6	1.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81336	0.	.00	.02	-5.1	0.00	.00	6	1.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81352	0.	.00	.02	-4.8	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
814 8	0.	.00	.03	-4.6	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81424	0.	.00	.02	-4.6	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81440	0.	.00	.02	-4.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81456	0.	.00	.01	-4.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81512	0.	.00	.02	-4.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8152A	0.	.00	.02	-5.0	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81544	0.	.00	.01	-5.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
816 0	0.	.00	.03	-5.0	0.00	.03	8	119.	0	59	42	15	2	0	0	0	0	0	0	0	0	0	0
81616	0.	.00	.06	-4.6	0.00	.04	8	152.	0	29	44	20	4	0	0	0	0	0	0	0	0	0	0
81632	0.	.00	.07	-4.0	0.00	.01	7	55.	0	48	33	13	3	0	0	0	0	0	0	0	0	0	0
81648	0.	.00	.06	-3.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
817 4	0.	.00	.05	-3.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81720	0.	.00	.04	-3.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81736	0.	.00	.03	-3.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81752	0.	.00	.02	-2.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
818 8	0.	.00	.01	-2.6	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81824	0.	.00	.02	-2.8	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81840	0.	.00	.02	-3.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81856	0.	.00	.02	-3.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81912	0.	.00	.02	-3.9	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81928	0.	.00	.02	-4.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81944	0.	.00	.01	-4.9	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
820 0	0.	.00	.01	-5.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0

DATE: 2/13/80 NATURAL ICING ENCOUNTER FLIGHT 14 TAPE RECORD # 101

TIME (LST)	IRU (CNTS)	MK 10 (G/M3)	MK 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
82016	0.	.00	.03	-5.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
82032	0.	.00	.02	-5.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
82048	0.	.00	.02	-5.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
821 4	0.	.00	.02	-5.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
82120	0.	.00	.01	-5.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
82136	0.	.00	.01	-5.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
82152	0.	.00	.01	-5.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
822 8	0.	.00	.01	-5.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
82224	0.	.00	.01	-5.6	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
82240	0.	.00	.01	-5.5	0.00	.00	7	0.	0	59	40	0	0	0	0	0	0	0	0	0	0	0	0
82256	0.	.00	.01	-5.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
82312	0.	.00	.01	-5.0	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
82328	0.	.00	.01	-4.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
82344	0.	.00	.01	-4.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
824 0	0.	.00	.01	-4.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
82416	0.	.00	.01	-4.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
82432	0.	.00	.01	-4.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
82448	0.	.00	.01	-4.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
825 4	0.	.00	.01	-4.6	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
82520	0.	.00	.01	-5.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
82536	0.	.00	.01	-5.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
82552	0.	.00	.02	-5.6	0.00	.00	6	12.	0	79	20	0	0	0	0	0	0	0	0	0	0	0	0
826 8	0.	.00	.01	-5.5	0.00	.00	6	23.	0	61	31	5	1	0	0	0	0	0	0	0	0	0	0
82624	0.	.00	.04	-5.7	0.00	.03	7	200.	0	59	29	9	1	0	0	0	0	0	0	0	0	0	0
82640	0.	.00	.09	-5.9	0.00	.07	8	289.	0	32	39	21	5	0	0	0	0	0	0	0	0	0	0
82656	0.	.00	.18	-6.2	0.00	.07	8	295.	0	33	37	21	4	1	0	0	0	0	0	0	0	0	0
82712	0.	.00	.27	-6.2	0.00	.07	8	283.	0	32	39	20	4	1	0	0	0	0	0	0	0	0	0
82728	0.	.00	.34	-6.1	0.00	.06	8	266.	0	41	35	17	4	1	0	0	0	0	0	0	0	0	0
82744	4.	.02	.41	-6.0	0.00	.05	8	207.	0	33	39	20	4	1	0	0	0	0	0	0	0	0	0
828 0	10.	.04	.25	-6.0	0.00	.06	9	209.	0	23	40	27	6	1	0	0	0	0	0	0	0	0	0
82816	10.	.04	.06	-5.9	0.00	.04	8	151.	0	32	40	20	5	1	0	0	0	0	0	0	0	0	0
82832	10.	.04	.10	-5.8	0.00	.04	8	155.	0	30	39	21	5	1	0	0	0	0	0	0	0	0	0
82848	10.	.04	.13	-5.8	0.00	.04	8	147.	0	30	41	20	4	1	0	0	0	0	0	0	0	0	0
829 4	10.	.04	.17	-5.7	0.00	.03	8	123.	0	31	39	19	6	2	0	0	0	0	0	0	0	0	0
82920	10.	.04	.20	-5.6	0.00	.04	8	154.	0	34	37	18	6	1	0	0	0	0	0	0	0	0	0
82936	10.	.04	.24	-5.8	0.00	.04	8	179.	0	32	37	21	5	1	0	0	0	0	0	0	0	0	0
82952	10.	.04	.30	-5.9	0.00	.04	8	182.	0	32	35	22	6	1	0	0	0	0	0	0	0	0	0
830 8	10.	.04	.34	-5.9	0.00	.03	8	147.	0	40	35	17	4	1	1	0	0	0	0	0	0	0	0
83024	10.	.04	.37	-5.8	0.00	.02	8	104.	0	43	35	14	4	1	0	0	0	0	0	0	0	0	0
83040	10.	.03	.39	-5.5	0.00	.01	7	72.	0	45	34	13	4	2	0	0	0	0	0	0	0	0	0
83056	21.	.02	.41	-5.1	0.00	.01	8	62.	0	40	37	16	4	1	0	0	0	0	0	0	0	0	0
83112	30.	.02	.42	-5.2	0.00	.01	8	34.	0	40	31	15	7	2	2	0	0	0	0	0	0	0	0
83128	30.	.02	.42	-5.3	0.00	.00	6	5.	0	60	19	13	6	0	0	0	0	0	0	0	0	0	0
83144	30.	.02	.41	-5.1	0.00	.00	8	5.	0	44	15	15	15	8	0	0	0	0	0	0	0	0	0
832 0	30.	.02	.42	-5.1	0.00	.00	8	14.	0	41	23	13	9	6	4	0	0	0	0	0	0	0	0
83216	30.	.02	.42	-5.1	0.00	.01	8	40.	0	43	30	15	6	2	1	0	0	0	0	0	0	0	0
83232	30.	.02	.43	-5.0	0.00	.01	7	52.	0	47	29	11	6	2	1	0	0	0	0	0	0	0	0
83248	28.	.02	.44	-5.1	0.00	.01	8	55.	0	42	31	15	7	2	0	0	0	0	0	0	0	0	0
833 4	29.	.02	.45	-5.1	0.00	.01	8	40.	0	40	35	17	5	1	0	0	0	0	0	0	0	0	0
83320	30.	.02	.45	-5.0	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0

DATE: 2/13/80 NATURAL ICING ENCOUNTER FLIGHT 14 TAPE RECORD # 151

TIME (LST)	IRU (CNTS)	MR 10 (G/M3)	MR 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
83336	30.	.02	.44	-5.0	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
83352	29.	.01	.44	-5.1	0.00	.00	6	27.	0	62	32	4	0	0	0	0	0	0	0	0	0	0	0
834 8	29.	.00	.44	-5.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
83424	30.	.00	.44	-5.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
83440	30.	.00	.43	-5.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
83456	30.	.00	.43	-5.2	0.00	.00	6	1.	0	94	5	0	0	0	0	0	0	0	0	0	0	0	0
83512	30.	.00	.43	-4.9	0.00	.00	6	0.	0	84	15	0	0	0	0	0	0	0	0	0	0	0	0
83528	29.	.00	.43	-5.0	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
83544	29.	.00	.42	-4.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
836 0	30.	.00	.41	-4.0	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
83616	30.	.00	.41	-3.9	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
83632	29.	.00	.40	-4.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
83648	30.	.00	.39	-4.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
837 4	30.	.00	.37	-4.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
83720	30.	.00	.36	-4.8	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
83736	29.	.00	.36	-5.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
83752	30.	.00	.35	-5.8	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
838 8	30.	.00	.33	-6.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
83824	30.	.00	.33	-6.8	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
83840	30.	.00	.34	-6.8	0.00	.02	18	20.	0	3	7	12	16	18	15	10	6	3	2	3	0	0	0
83856	29.	.00	.40	-6.6	0.00	.10	21	49.	0	1	3	6	10	14	16	15	12	8	4	3	2	0	0
83912	26.	.00	.08	-7.1	0.00	.16	22	92.	0	2	4	6	8	13	17	18	13	7	3	1	0	0	0
83928	28.	.00	.17	-7.4	0.00	.06	16	84.	0	7	12	13	13	15	15	11	5	2	1	0	0	0	0
83944	29.	.00	.25	-7.3	0.00	.12	21	70.	0	2	4	6	10	15	18	17	12	7	4	1	0	0	0
840 0	98.	.03	.29	-7.3	0.00	.21	21	104.	0	1	3	6	11	16	19	17	11	5	3	1	0	0	0
84016	190.	.06	.17	-7.8	0.00	.21	21	101.	0	1	3	6	10	15	18	18	12	6	3	1	0	0	0
84032	191.	.06	.35	-7.9	0.00	.17	22	78.	0	1	3	6	8	12	15	17	15	9	4	1	1	0	0
84048	209.	.10	.11	-8.3	0.00	.19	23	81.	0	1	3	6	9	11	12	14	15	12	7	3	1	0	0
841 4	210.	.10	.24	-8.5	0.00	.16	21	77.	0	1	3	7	11	14	13	11	11	9	8	4	1	0	0
84120	215.	.10	.35	-9.3	0.00	.16	18	97.	0	1	4	9	16	21	16	10	7	4	3	1	0	0	0
84136	228.	.09	.08	-9.2	0.00	.14	18	91.	0	1	5	11	18	22	18	10	6	3	1	0	0	0	0
84152	228.	.09	.22	-9.6	0.00	.15	18	101.	0	1	5	11	19	20	16	11	6	3	1	1	0	0	0
842 8	228.	.09	.33	-9.4	0.00	.06	12	94.	0	5	18	35	26	9	3	1	0	0	0	0	0	0	0
84224	228.	.09	.39	-9.4	0.00	.06	13	86.	0	4	15	35	33	9	1	0	0	0	0	0	0	0	0
84240	242.	.05	.25	-10.2	0.00	.10	13	116.	0	3	12	29	34	16	3	0	0	0	0	0	0	0	0
84256	245.	.05	.03	-10.2	0.00	.02	15	18.	0	3	8	18	29	25	8	3	1	0	0	0	0	0	0
84312	244.	.05	.09	-10.2	0.00	.13	18	86.	0	1	5	11	20	22	17	13	5	2	0	0	0	0	0
84328	245.	.05	.28	-10.6	0.00	.22	18	127.	0	1	4	9	17	20	19	15	7	2	1	0	0	0	0
84344	280.	.13	.15	-10.7	0.00	.19	19	114.	0	1	4	9	16	21	19	14	7	3	1	0	0	0	0
844 0	287.	.13	.12	-10.3	0.00	.05	18	33.	0	1	4	9	18	26	19	11	5	1	1	0	0	0	0
84416	287.	.13	.13	-9.9	0.00	.01	18	6.	0	2	4	9	18	19	15	15	10	4	0	0	0	0	0
84432	287.	.13	.15	-10.2	0.00	.04	16	31.	0	2	6	13	28	35	9	3	0	0	0	0	0	0	0
8448	287.	.13	.18	-10.1	0.00	.07	13	80.	0	2	10	32	41	10	1	0	0	0	0	0	0	0	0
845 4	287.	.13	.29	-9.9	0.00	.13	15	117.	0	2	9	22	21	11	13	11	5	1	0	0	0	0	0
84520	298.	.04	.24	-10.0	0.00	.15	19	82.	0	1	4	8	13	20	24	17	8	2	0	0	0	0	0
84536	301.	.03	.23	-9.5	0.00	.13	18	83.	0	1	4	10	17	26	22	10	4	1	0	0	0	0	0
84552	313.	.09	.47	-9.3	0.00	.26	18	150.	0	1	3	9	18	26	21	9	4	1	0	0	0	0	0
846 8	325.	.13	.62	-9.4	0.00	.27	18	183.	0	1	5	12	19	22	18	9	4	2	1	0	0	0	0
84624	325.	.13	.40	-9.2	0.00	.23	17	179.	0	2	7	15	19	18	14	9	5	3	2	1	0	0	0
84640	324.	.13	.11	-9.2	0.00	.27	17	179.	0	1	5	12	20	24	16	8	4	2	1	0	0	0	0

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TIME (LST)	IRU (CNTS)	MR 10 (G/M3)	MR 12 (G/M3)	OAT (C)	RSAT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
84656	348.	.16	.24	-9.3	0.00	.27	16	193.	0	1	5	13	27	28	12	4	2	1	1	0	0	0	0
84712	385.	.18	.23	-9.1	0.00	.27	17	177.	0	1	4	12	24	25	12	5	4	3	2	1	1	0	0
84728	398.	.16	.18	-8.9	0.00	.25	17	168.	0	1	5	13	24	22	11	6	5	4	3	1	0	0	0
84744	404.	.16	.26	-8.7	0.00	.22	17	142.	0	1	5	11	20	22	13	7	6	4	3	1	0	0	0
848 0	422.	.15	.15	-8.4	0.00	.23	18	143.	0	1	4	11	20	21	13	9	7	5	2	1	0	0	0
84816	428.	.15	.19	-8.4	0.00	.16	20	81.	0	1	3	7	12	17	16	14	11	7	3	1	0	0	0
84832	437.	.13	.24	-8.4	0.00	.25	20	121.	0	1	3	7	13	17	17	15	11	7	3	1	0	0	0
84848	450.	.12	.25	-8.6	0.00	.30	21	138.	0	1	3	6	12	17	17	16	11	7	3	1	0	0	0
849 4	470.	.13	.16	-8.7	0.00	.35	21	153.	0	1	3	6	11	17	17	15	11	6	3	2	1	0	0
84920	487.	.22	.20	-8.9	0.00	.36	21	158.	0	1	2	6	11	17	17	15	11	6	4	2	1	0	0
84936	504.	.24	.24	-9.0	0.00	.35	19	184.	0	1	3	8	15	18	15	13	9	6	3	2	1	0	0
84952	521.	.23	.22	-9.1	0.00	.32	17	231.	0	1	6	14	21	16	11	8	7	4	3	1	0	0	0
850 8	534.	.22	.18	-10.4	0.00	.33	18	230.	0	1	6	14	19	16	12	10	8	4	3	1	0	0	0
85024	549.	.24	.21	-12.1	0.00	.37	19	233.	0	1	6	10	14	16	15	12	10	6	3	1	0	0	0
85040	570.	.25	.25	-12.7	0.00	.36	19	197.	0	1	4	9	16	17	14	12	10	6	3	1	1	0	0
85056	587.	.25	.25	-12.9	0.00	.36	21	165.	0	1	3	7	12	16	16	14	11	7	4	2	1	0	0
85112	610.	.23	.16	-13.0	0.00	.37	21	172.	0	1	3	7	12	16	17	14	11	7	4	2	1	0	0
85128	629.	.26	.19	-13.0	0.00	.36	20	191.	0	1	3	8	14	17	15	14	10	6	3	1	0	0	0
85144	646.	.24	.24	-13.0	0.00	.31	19	174.	0	1	4	9	15	16	14	13	10	6	4	1	0	0	0
852 0	659.	.21	.26	-13.4	0.00	.33	17	221.	0	1	5	13	20	18	11	9	7	4	2	1	0	0	0
85216	681.	.22	.15	-13.3	0.00	.35	18	225.	0	1	5	12	20	20	12	9	7	4	2	1	0	0	0
85232	696.	.23	.20	-13.2	0.00	.37	19	202.	0	1	4	9	14	18	15	12	9	6	3	1	1	0	0
85248	715.	.24	.24	-13.1	0.00	.39	20	183.	0	1	3	7	12	17	17	14	10	6	4	2	1	0	0
853 4	734.	.25	.25	-13.1	0.00	.41	20	179.	0	0	2	6	12	18	17	14	11	6	4	2	1	0	0
85320	756.	.24	.18	-12.7	0.00	.40	20	179.	0	0	2	6	12	18	17	15	10	6	4	2	1	0	0
85336	775.	.26	.16	-12.7	0.00	.35	21	160.	0	1	3	7	12	16	17	15	11	6	4	2	1	0	0
85352	785.	.23	.27	-12.7	0.00	.35	22	146.	0	0	3	6	11	14	14	13	10	6	4	3	2	2	3
854 8	799.	.18	.17	-12.8	0.00	.28	20	134.	0	1	3	8	13	17	16	14	11	6	3	2	0	0	0
85424	807.	.16	.41	-12.9	0.00	.16	20	84.	0	1	4	8	13	18	17	14	11	6	3	1	0	0	0
85440	819.	.14	.14	-12.9	0.00	.23	16	135.	0	1	4	10	16	20	15	11	8	5	2	1	0	0	0
85456	821.	.15	.30	-13.0	0.00	.33	18	224.	0	1	5	11	18	18	13	9	7	5	4	1	0	0	0
85512	851.	.19	.15	-13.0	0.00	.35	19	180.	0	1	3	9	15	18	14	11	10	6	4	2	0	0	0
85528	864.	.21	.19	-13.0	0.00	.37	19	198.	0	1	3	9	17	19	13	10	9	6	3	2	1	0	0
85544	876.	.22	.25	-13.2	0.00	.37	20	157.	0	0	2	6	12	18	17	13	11	7	4	2	0	0	0
856 0	891.	.22	.25	-13.2	0.00	.40	21	160.	0	0	2	5	11	16	17	14	12	9	5	2	0	0	0
85616	907.	.22	.15	-13.3	0.00	.40	21	173.	0	0	2	7	13	16	14	12	11	9	6	2	1	0	0
85632	918.	.22	.19	-13.4	0.00	.32	20	159.	0	0	3	10	16	16	11	9	10	9	6	2	1	0	0
85648	925.	.22	.22	-13.5	0.00	.21	17	137.	0	1	5	14	21	16	10	7	6	6	5	2	1	0	0
857 4	924.	.21	.36	-13.5	0.00	.17	17	119.	0	1	5	13	21	26	19	8	2	0	0	0	0	0	0
85720	938.	.09	.10	-13.4	0.00	.28	17	168.	0	1	4	11	22	30	19	6	2	0	0	0	0	0	0
85736	939.	.09	.29	-13.1	0.00	.21	16	158.	0	1	6	15	23	24	13	6	4	2	1	0	0	0	0
85752	946.	.10	.25	-12.9	0.00	.18	16	144.	0	2	7	17	23	19	10	7	5	3	2	0	0	0	0
858 8	948.	.10	.14	-12.8	0.00	.22	18	224.	0	3	14	13	9	10	12	12	11	6	3	1	0	0	0
85824	951.	.11	.35	-12.6	0.00	.23	22	159.	0	3	7	5	7	11	16	18	15	8	4	1	0	0	0
85840	963.	.13	.09	-12.4	0.00	.26	23	120.	0	1	2	4	7	12	17	18	16	10	5	2	0	0	0
85856	963.	.13	.32	-12.1	0.00	.17	23	139.	0	5	6	4	6	9	13	14	14	10	7	3	1	0	0
85912	970.	.11	.32	-12.0	0.00	.15	21	137.	0	5	7	7	8	12	16	16	12	7	3	1	0	0	0
85928	974.	.11	.14	-11.6	0.00	.24	22	102.	0	1	2	4	8	13	16	17	15	10	5	2	1	0	0
85944	974.	.11	.34	-11.5	0.00	.17	21	74.	0	1	2	6	10	16	19	17	11	7	3	1	0	0	0
9 0 0	985.	.11	.17	-11.3	0.00	.16	21	79.	0	1	3	6	11	16	18	16	10	5	2	1	1	2	0

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TIME (LST)	IRU (CNTS)	MR 10 (G/M3)	MR 12 (G/M3)	OAT (C)	RSAT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
9 016	984.	.11	.14	-11.2	0.00	.17	21	100.	0	2	4	6	10	14	16	15	11	7	4	2	0	1	1
9 032	984.	.11	.51	-11.1	0.00	.18	21	134.	0	3	6	7	9	12	14	13	12	7	6	3	1	0	0
9 048	990.	.09	.22	-11.1	0.00	.14	21	116.	0	4	7	7	9	11	12	11	10	7	6	4	3	2	1
9 1 4	992.	.09	.09	-11.0	0.00	.08	24	37.	0	1	3	5	7	11	11	9	11	9	7	5	3	6	3
9 120	991.	.09	.11	-10.8	0.00	.02	35	3.	0	0	0	1	2	4	5	6	7	7	10	9	8	15	19
9 136	991.	.09	.11	-10.6	0.00	.02	36	3.	0	0	0	1	1	3	4	5	8	7	9	9	12	15	19
9 152	991.	.09	.10	-10.2	0.00	.01	34	2.	0	0	1	2	3	5	8	7	10	4	6	8	10	13	16
9 2 8	990.	.09	.10	-10.1	0.00	.00	27	0.	0	1	1	3	4	4	13	10	14	19	26	0	0	0	0
9 224	989.	.09	.10	-10.1	0.00	.01	34	1.	0	0	0	0	1	4	6	5	7	9	15	8	10	13	16
9 240	990.	.09	.09	-10.0	0.00	.01	32	1.	0	0	1	1	3	4	6	7	11	10	13	8	0	13	17
9 256	991.	.09	.08	-9.8	0.00	.02	35	3.	0	0	0	1	2	2	5	5	7	7	15	10	12	10	19
9 312	991.	.09	.08	-9.5	0.00	.02	38	2.	0	0	0	1	2	2	4	7	4	6	9	7	10	18	23
9 328	991.	.09	.07	-9.1	0.00	.01	34	3.	0	0	1	2	2	4	5	6	7	6	13	11	7	18	11
9 344	991.	.02	.06	-9.1	0.00	.02	32	4.	0	1	2	2	3	5	6	7	6	11	11	10	12	8	9
9 4 0	991.	.00	.05	-8.8	0.00	.01	32	3.	0	0	1	3	4	5	7	7	7	7	9	6	16	9	12
9 416	991.	.00	.06	-8.8	0.00	.00	22	2.	0	2	5	8	10	9	14	7	10	13	18	0	0	0	0
9 432	991.	.00	.05	-8.7	0.00	.00	18	1.	0	5	8	10	12	15	16	12	17	0	0	0	0	0	0
9 448	991.	.00	.05	-8.6	0.00	.00	23	1.	0	2	4	6	8	12	9	14	10	13	18	0	0	0	0
9 5 4	991.	.00	.04	-8.8	0.00	.00	16	0.	0	5	8	10	30	17	27	0	0	0	0	0	0	0	0
9 520	991.	.00	.04	-9.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
9 536	991.	.00	.03	-9.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
9 552	991.	.00	.03	-9.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
9 6 8	990.	.00	.03	-9.0	0.00	.00	6	1.	0	85	14	0	0	0	0	0	0	0	0	0	0	0	0
9 624	988.	.00	.03	-8.9	0.00	.00	7	7.	0	50	32	13	4	0	0	0	0	0	0	0	0	0	0
9 640	988.	.00	.03	-8.8	0.00	.00	6	20.	0	61	24	7	3	3	0	0	0	0	0	0	0	0	0
9 656	991.	.00	.03	-9.2	0.00	.00	6	0.	0	84	15	0	0	0	0	0	0	0	0	0	0	0	0
9 712	991.	.00	.03	-9.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
9 728	990.	.00	.03	-9.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
9 744	991.	.00	.01	-8.9	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
9 8 0	991.	.00	.01	-8.9	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
9 816	991.	.00	.01	-9.0	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
9 832	991.	.00	.00	-9.0	0.00	.00	7	0.	0	47	52	0	0	0	0	0	0	0	0	0	0	0	0
9 848	991.	.00	0.00	-9.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
9 9 4	991.	.00	0.00	-9.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
9 920	991.	.00	0.00	-9.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
9 936	991.	.00	.00	-9.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
9 952	991.	.00	.00	-9.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
910 8	432.	.00	0.00	-9.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
91024	0.	.00	.00	-9.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
91040	0.	.00	0.00	-9.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
91056	0.	.00	0.00	-9.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
91112	0.	.00	0.00	-9.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
91128	0.	.00	0.00	-9.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
91144	0.	.00	0.00	-9.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
912 0	0.	.00	0.00	-9.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
91216	0.	.00	0.00	-9.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
91232	0.	.00	0.00	-9.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
91248	0.	.00	0.00	-9.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
913 4	0.	.00	0.00	-9.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
91320	0.	.00	0.00	-9.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0

DATE: 2/13/80 NATURAL ICING ENCOUNTER FLIGHT 14 TAPE RECORD # 301

TIME (LST)	IRU (CNTS)	MK 10 (G/M3)	MK 12 (G/M3)	OAT (C)	HSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
91336	0.	.00	0.00	-9.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
91352	0.	.00	0.00	-9.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0

NATURAL ICING ENCOUNTER FLIGHT 14
AIRCRAFT STATE PARAMETERS (JUN=1M 31M)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
75336	15.7	723.	.3F	68.5	4.9
75352	17.2	703.	2.36	72.0	4.9
754 8	16.4	719.	.63	68.7	5.1
75424	15.7	725.	.27	68.3	4.9
75440	15.6	725.	.27	68.3	4.9
75456	15.7	723.	.27	68.6	4.6
75512	15.8	723.	.27	68.6	4.9
75528	15.9	725.	.27	68.9	5.0
75544	16.0	725.	.27	68.8	4.9
756 0	15.9	725.	.27	68.7	4.9
75616	15.8	725.	.27	68.6	5.0
75632	15.7	725.	.27	68.5	5.0
7564M	15.7	725.	.26	66.1	5.0
757 4	15.8	727.	.26	68.0	5.0
75720	15.8	729.	.27	68.2	4.9
75736	14.5	727.	.27	67.0	4.9
75752	14.8	727.	.27	67.2	4.9
758 8	14.8	723.	.27	67.3	4.9
75824	13.9	729.	.27	65.7	5.1
75840	12.8	729.	.2F	64.1	4.9
75856	14.3	729.	.27	66.0	5.0
75912	14.1	729.	.27	66.2	5.0
7592M	14.7	731.	.27	67.0	5.0
75944	12.7	727.	.26	56.8	4.9
8 0 0	10.6	725.	.27	53.0	5.3
8 016	11.2	727.	.27	53.5	5.0
8 032	11.2	729.	.27	53.6	5.0
8 04M	11.3	729.	.27	53.7	4.9
8 1 4	11.3	729.	.27	53.8	5.0
8 120	11.3	731.	.27	53.8	5.1
8 136	11.3	731.	.27	53.8	4.9
8 152	11.3	733.	.27	53.9	5.1
8 2 8	11.3	731.	.27	53.9	4.9
8 224	11.3	731.	.27	53.9	5.0
8 240	11.3	733.	.27	53.9	5.0
8 256	11.4	733.	.27	53.8	5.1
8 312	10.6	733.	.27	52.7	5.0
8 328	9.0	735.	.27	50.6	5.1
8 344	11.0	733.	.25	55.0	5.0
8 4 0	12.9	735.	.26	64.4	5.1
8 416	15.9	737.	.27	68.7	5.1
8 432	15.8	735.	.27	68.8	4.9
8 448	15.7	735.	.27	68.6	5.1
8 5 4	15.7	735.	.57	68.8	5.0
8 520	23.2	690.	3.93	83.1	4.0
8 536	36.8	680.	5.94	100.6	3.6
8 552	38.7	686.	6.14	102.6	3.7
8 6 8	40.4	713.	6.16	103.6	12.0
8 624	37.8	707.	6.07	100.6	8.4
8 640	37.9	688.	6.03	100.6	3.4

NATURAL ICING ENCOUNTER FLIGHT 1A
AIRCRAFT STATE PARAMETERS (JUN=1H 31R)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
8 656	37.0	656.	5.97	99.4	3.4
8 712	36.5	686.	5.95	98.6	3.7
8 728	36.4	696.	5.91	98.7	3.2
8 744	36.4	684.	5.92	98.6	3.2
8 8 0	36.5	686.	5.92	98.8	3.6
8 816	36.6	696.	5.94	98.9	3.3
8 832	37.3	684.	5.95	99.8	3.7
8 848	36.0	680.	5.92	97.5	3.7
8 9 4	36.0	678.	5.95	98.1	3.6
8 920	35.3	680.	5.80	96.8	3.6
8 936	35.2	680.	5.85	96.9	3.6
8 952	35.7	682.	5.85	97.6	3.6
810 8	37.2	686.	6.06	102.9	11.2
81024	39.6	794.	6.61	106.6	36.2
81040	40.7	987.	6.37	107.4	54.2
81056	39.3	1185.	6.37	105.5	40.8
81112	38.5	1340.	6.37	105.1	28.8
8112B	40.2	1537.	6.37	105.8	74.6
81144	40.1	1738.	6.38	105.1	71.3
812 0	40.3	1924.	6.41	104.9	73.0
81216	39.9	2121.	6.41	103.9	72.4
81232	39.7	2311.	6.41	103.2	73.9
81248	39.4	2532.	6.41	102.4	69.6
813 4	38.9	2745.	6.41	101.3	68.6
81320	38.9	2901.	6.41	101.2	72.6
81336	38.6	3069.	6.40	100.4	72.7
81352	38.2	3240.	6.41	99.9	70.1
814 8	37.9	3369.	6.41	99.2	70.3
81424	37.6	3524.	6.41	98.6	71.6
81440	37.3	3657.	6.40	98.0	72.3
81456	37.0	3796.	6.40	97.8	70.5
81512	34.8	3936.	6.41	97.0	69.7
8152B	35.1	3959.	6.16	95.9	84.0
81544	35.4	3980.	6.52	97.2	82.8
816 0	39.0	4110.	6.74	101.4	71.5
81616	38.8	4309.	6.75	100.6	68.5
81632	38.7	4503.	6.75	100.3	66.0
8164B	38.4	4676.	6.76	99.5	69.0
817 4	37.7	4847.	6.76	98.1	69.4
81720	37.4	4943.	6.76	97.8	76.2
81736	35.8	5035.	6.76	97.0	77.1
81752	35.5	5219.	6.76	96.1	67.5
818 8	36.5	5379.	6.76	96.0	66.1
81824	36.4	5533.	6.76	95.6	66.7
81840	36.2	5685.	6.76	95.2	66.5
81856	36.1	5811.	6.76	95.0	71.5
81912	35.9	5933.	6.76	94.5	71.4
81928	32.4	5987.	6.76	93.9	81.3
81944	35.8	6024.	6.76	94.4	81.1
820 0	36.2	6085.	6.75	94.8	82.3

NATIONAL ICING ENCOUNTER FLIGHT 14
AIRCRAFT STATE PARAMETERS (JUNE 1M 31R)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
82016	35.9	6139.	6.75	94.5	81.9
82032	35.2	6169.	6.76	94.4	84.6
82048	32.1	6140.	6.76	93.8	91.6
821 4	34.1	6107.	6.82	93.5	91.5
82120	34.8	6100.	6.58	93.6	88.9
82136	35.9	6083.	6.64	94.9	85.7
82152	36.6	6129.	7.07	98.3	82.1
822 8	38.4	6203.	7.07	98.2	80.8
82224	36.5	6228.	7.03	97.6	90.7
82240	32.1	6196.	6.14	88.9	93.8
82256	31.1	6100.	6.09	88.4	91.0
82312	31.0	5964.	6.08	88.4	90.8
82328	31.1	5896.	6.08	88.8	90.3
82344	31.1	5796.	6.08	89.1	90.3
824 0	31.3	5690.	6.09	89.5	91.9
82416	31.1	5617.	6.09	89.5	89.3
82432	31.4	5516.	6.10	90.0	91.8
82448	31.5	5417.	6.10	90.4	91.6
825 4	31.9	5295.	6.10	91.1	93.2
82520	32.3	5159.	6.10	91.8	94.6
82536	32.2	5089.	6.10	91.7	92.4
82552	32.4	4981.	6.09	92.2	91.5
826 8	32.3	4922.	6.09	92.2	90.8
82624	32.6	4856.	6.09	92.7	92.1
82640	33.2	4772.	6.14	93.7	92.5
82656	36.2	4732.	6.50	98.1	91.6
82712	35.4	4716.	6.41	96.6	92.9
82728	35.0	4685.	6.32	96.4	93.8
82744	36.0	4634.	6.44	97.0	93.1
828 0	35.9	4610.	6.44	97.6	92.5
82816	35.7	4622.	6.44	97.3	90.8
82832	35.7	4627.	6.44	97.4	90.5
82848	35.8	4615.	6.45	97.6	91.4
829 4	35.8	4627.	6.45	97.6	90.6
82920	35.6	4643.	6.44	97.2	89.5
82936	35.8	4615.	6.44	97.6	92.5
82952	36.2	4576.	6.45	98.2	94.1
830 8	36.0	4569.	6.44	98.0	92.8
83024	35.8	4566.	6.42	97.7	93.2
83040	35.0	4584.	6.33	96.5	91.9
83056	33.4	4622.	6.32	95.0	88.4
83112	34.9	4543.	6.32	96.5	96.5
83128	34.9	4478.	6.32	96.6	94.0
83144	34.6	4520.	6.32	96.1	88.1
832 0	34.7	4508.	6.32	96.3	91.2
83216	35.0	4543.	6.36	96.6	85.5
83232	35.6	4592.	6.43	97.5	86.2
83248	34.2	4615.	6.57	97.7	89.1
833 4	36.8	4700.	6.65	99.4	82.6
83320	37.8	4741.	6.73	100.1	86.3

NATURAL ICING ENCOUNTER FLIGHT 14
AIRCRAFT STATE PARAMETERS (JUNE 1M 31R)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
83336	36.0	4835.	6.45	97.5	91.7
83352	33.3	4828.	6.42	95.0	91.3
834 8	34.8	4830.	6.54	97.3	88.4
83424	37.8	4935.	6.78	100.0	88.5
83440	34.5	4934.	6.29	94.8	92.5
83456	32.8	4941.	6.13	92.8	92.8
83512	32.8	4920.	6.13	92.3	88.6
83528	34.1	4927.	6.56	96.9	85.0
83544	39.2	5085.	7.09	102.5	74.3
836 0	41.7	5257.	7.28	105.1	60.9
83616	42.3	5419.	7.29	105.3	85.1
83632	40.6	5593.	7.30	103.6	81.6
83648	41.1	5767.	7.28	103.2	81.9
837 4	40.0	5970.	7.30	102.5	79.4
83720	41.6	6161.	7.42	103.4	78.9
83736	44.1	6371.	7.79	107.4	78.6
83752	45.8	6575.	7.83	108.5	84.5
838 8	45.7	6780.	7.84	107.8	84.5
83824	44.8	7044.	7.83	106.0	78.4
83840	44.6	7314.	7.83	105.8	78.7
83856	42.8	7586.	7.83	103.6	76.1
83912	40.2	7841.	7.84	101.7	73.0
8392R	42.7	8111.	7.86	103.7	76.6
83944	43.4	8332.	7.85	104.8	74.1
840 0	43.6	8536.	7.80	102.1	78.1
84016	43.8	8706.	7.86	101.9	78.8
84032	43.2	8947.	7.87	100.8	73.8
84048	43.2	9141.	7.85	100.4	74.1
841 4	42.6	9347.	7.86	99.7	76.2
84120	39.8	9463.	7.85	99.0	80.1
84136	42.9	9609.	7.84	99.3	76.3
84152	42.3	9822.	7.86	98.2	74.2
842 8	41.9	10013.	7.84	97.4	72.8
84224	42.2	10126.	7.86	97.6	79.5
84240	43.0	10112.	7.85	99.1	90.3
84256	40.3	10123.	7.58	95.5	92.3
84312	34.6	10115.	7.24	89.9	90.1
8432R	34.6	10088.	7.00	93.8	87.1
84344	42.1	10093.	7.73	97.7	86.5
844 0	41.9	10198.	7.82	97.5	81.3
84416	41.6	10243.	7.82	97.1	85.5
84432	41.1	10202.	7.79	97.1	89.2
84448	35.6	10246.	6.86	87.7	96.9
845 4	29.4	10109.	6.17	79.8	92.9
84520	29.2	9888.	6.04	79.9	92.6
84536	25.8	9663.	5.82	75.7	91.1
84552	26.1	9379.	5.65	76.9	87.4
846 8	29.3	9100.	6.00	82.1	89.6
84624	31.4	8952.	6.42	85.6	85.4
84640	35.9	8907.	7.01	92.2	82.3

NATURAL ICING ENCOUNTER FLIGHT 14
AIRCRAFT STATE PARAMETERS (JUN=1M 31R)

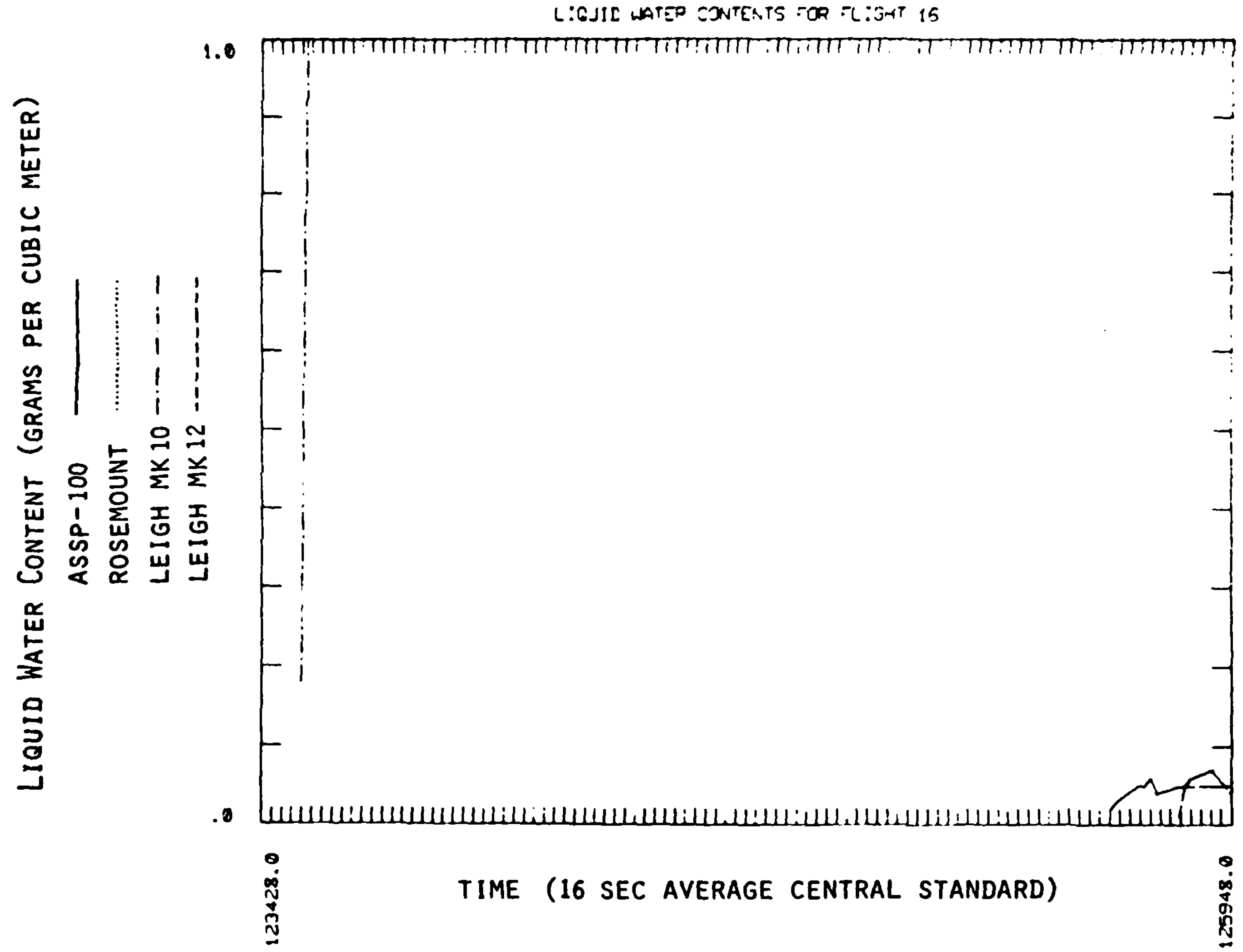
TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
84656	36.4	8852.	6.81	91.7	87.1
84712	35.7	8794.	6.87	90.7	82.8
84728	34.1	8733.	6.80	89.1	87.4
84744	33.9	8674.	6.82	88.6	82.5
848 0	34.8	8631.	6.73	90.4	82.8
84816	39.1	8610.	7.27	96.8	82.8
84832	40.6	8639.	7.40	98.3	84.2
84848	41.2	8671.	7.41	99.2	87.1
849 4	41.9	8677.	7.41	99.9	89.0
84920	42.4	8674.	7.42	100.8	89.4
84936	43.0	8655.	7.42	101.6	90.6
84952	42.9	8639.	7.43	101.4	89.1
850 8	42.7	8661.	7.43	100.8	87.4
85024	43.6	8663.	7.51	102.5	88.6
85040	43.1	8666.	7.44	101.4	89.0
85056	40.9	8645.	7.45	101.0	89.6
85112	43.5	8634.	7.45	102.3	87.7
85128	40.2	8560.	7.45	101.8	90.8
85144	43.2	8546.	7.48	101.4	83.8
852 0	43.4	8647.	7.64	102.6	79.4
85216	44.9	8679.	7.73	104.6	85.7
85232	44.7	8701.	7.71	103.9	87.7
85248	45.0	8706.	7.65	104.2	89.3
853 4	44.8	8738.	7.63	104.0	88.5
85320	43.2	8669.	7.25	101.2	90.5
85336	39.2	8607.	7.09	97.7	91.5
85352	40.7	8578.	7.41	100.8	87.1
854 8	42.2	8597.	7.50	101.2	84.5
85424	42.7	8624.	7.58	102.0	84.4
85440	44.2	8634.	7.59	103.7	88.1
85456	43.5	8626.	7.60	101.7	88.5
85512	45.1	8669.	7.79	104.7	86.2
85528	45.8	8690.	7.78	105.5	89.6
85544	45.6	8746.	7.79	105.0	87.5
856 0	46.1	8775.	7.79	105.4	89.2
85616	45.3	8791.	7.76	104.9	91.0
85632	46.0	8799.	7.76	105.2	89.0
85648	44.9	8813.	7.77	104.6	90.6
857 4	42.1	8783.	7.24	99.1	92.9
85720	39.9	8709.	7.05	96.4	91.3
85736	39.7	8607.	7.05	96.4	92.6
85752	39.8	8504.	7.05	97.1	94.1
858 8	37.6	8422.	7.06	96.0	93.4
85824	40.4	8335.	7.05	98.0	93.3
85840	40.7	8208.	7.05	96.7	95.8
85856	40.3	8101.	6.98	98.1	95.6
85912	39.0	7954.	6.79	96.7	97.7
8592R	39.6	7749.	6.79	98.0	100.2
85944	38.4	7627.	6.71	96.3	95.8
9 0 0	38.6	7475.	6.76	97.1	95.3

NATURAL ICING ENCOUNTER FLIGHT 14
AIRCRAFT STATE PARAMETERS (JUN-1H 31A)

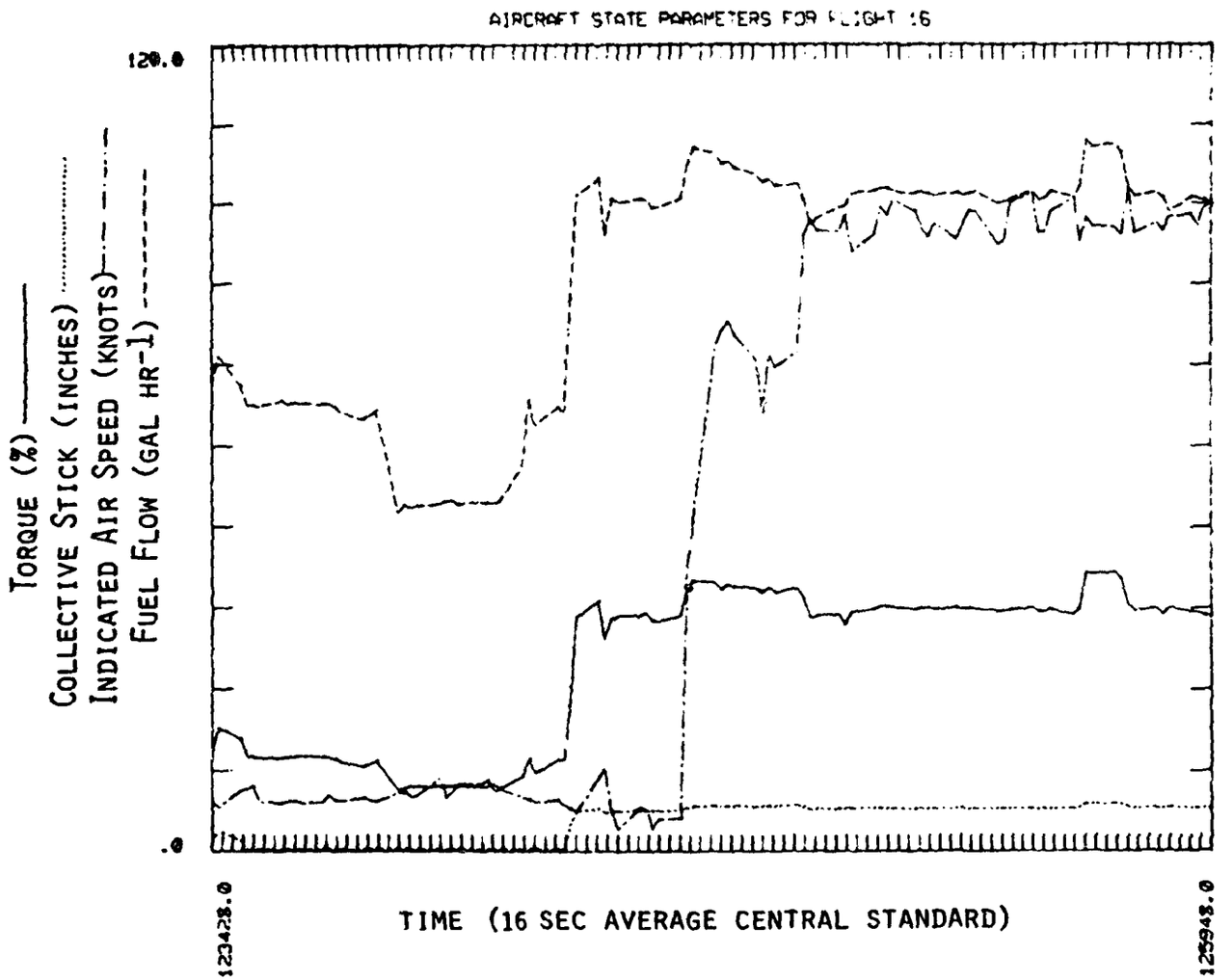
TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
9 016	38.9	7320.	6.77	97.7	9[illegible].6
9 032	39.5	7168.	6.77	98.6	9[illegible].6
9 048	39.6	7018.	6.77	99.2	9[illegible].7
9 1 4	40.0	6868.	6.77	99.9	99.6
9 120	40.5	6630.	6.76	101.0	104.1
9 136	38.1	6478.	6.77	99.3	99.6
9 152	39.9	6322.	6.77	100.8	101.7
9 2 8	36.7	6225.	6.77	98.5	96.2
9 224	34.4	6188.	6.78	96.7	90.5
9 240	35.1	6134.	6.76	97.1	92.3
9 256	37.7	6043.	6.69	98.0	95.2
9 312	37.2	5957.	6.52	97.6	96.6
9 328	37.1	5776.	6.52	97.7	100.[illegible]
9 344	35.0	5702.	6.49	95.9	98.6
9 4 0	35.1	5545.	6.28	95.5	102.8
9 416	35.7	5391.	6.28	96.3	102.8
9 432	31.9	5324.	5.96	91.0	93.4
9 448	32.7	5188.	5.96	92.8	98.2
9 5 4	32.6	5010.	5.97	92.6	97.6
9 520	32.3	4901.	5.97	92.3	92.1
9 536	31.3	4854.	5.87	90.8	89.7
9 552	31.4	4748.	5.80	91.1	92.8
9 6 8	29.7	4648.	5.80	90.5	92.1
9 624	25.5	4510.	5.32	86.1	97.1
9 640	25.1	4245.	4.96	84.9	101.6
9 656	28.0	3961.	4.95	87.3	99.5
9 712	26.7	3755.	4.95	86.1	9[illegible].4
9 728	25.1	3509.	4.69	84.6	99.5
9 744	24.6	3236.	4.40	83.1	97.8
9 8 0	23.8	2929.	4.25	82.4	97.8
9 816	29.5	2706.	5.30	92.1	90.6
9 832	31.0	2607.	5.46	93.7	91.2
9 848	30.3	2596.	5.43	92.6	8[illegible].
9 9 4	30.2	2618.	5.45	92.3	7[illegible].3
9 920	30.2	2652.	5.47	92.4	75.[illegible]
9 936	29.1	2667.	5.31	90.6	77.7
9 952	29.1	2676.	5.31	90.6	76.6
910 8	28.0	2706.	5.31	89.9	74.3
91024	24.2	2669.	5.31	89.1	79.9
91040	29.0	2635.	5.30	89.8	80.5
91056	28.8	2652.	5.30	89.5	75.1
91112	28.9	2650.	5.30	90.3	76.4
91128	28.9	2635.	5.31	89.6	78.4
91144	29.2	2611.	5.31	90.2	80.1
912 0	29.0	2622.	5.31	90.5	76.1
91216	28.9	2648.	5.30	90.3	74.3
91232	29.0	2659.	5.30	90.4	75.3
91248	28.9	2682.	5.31	90.2	73.4
913 4	29.0	2699.	5.30	90.1	7[illegible].6
91320	29.0	2687.	5.30	90.4	76.1

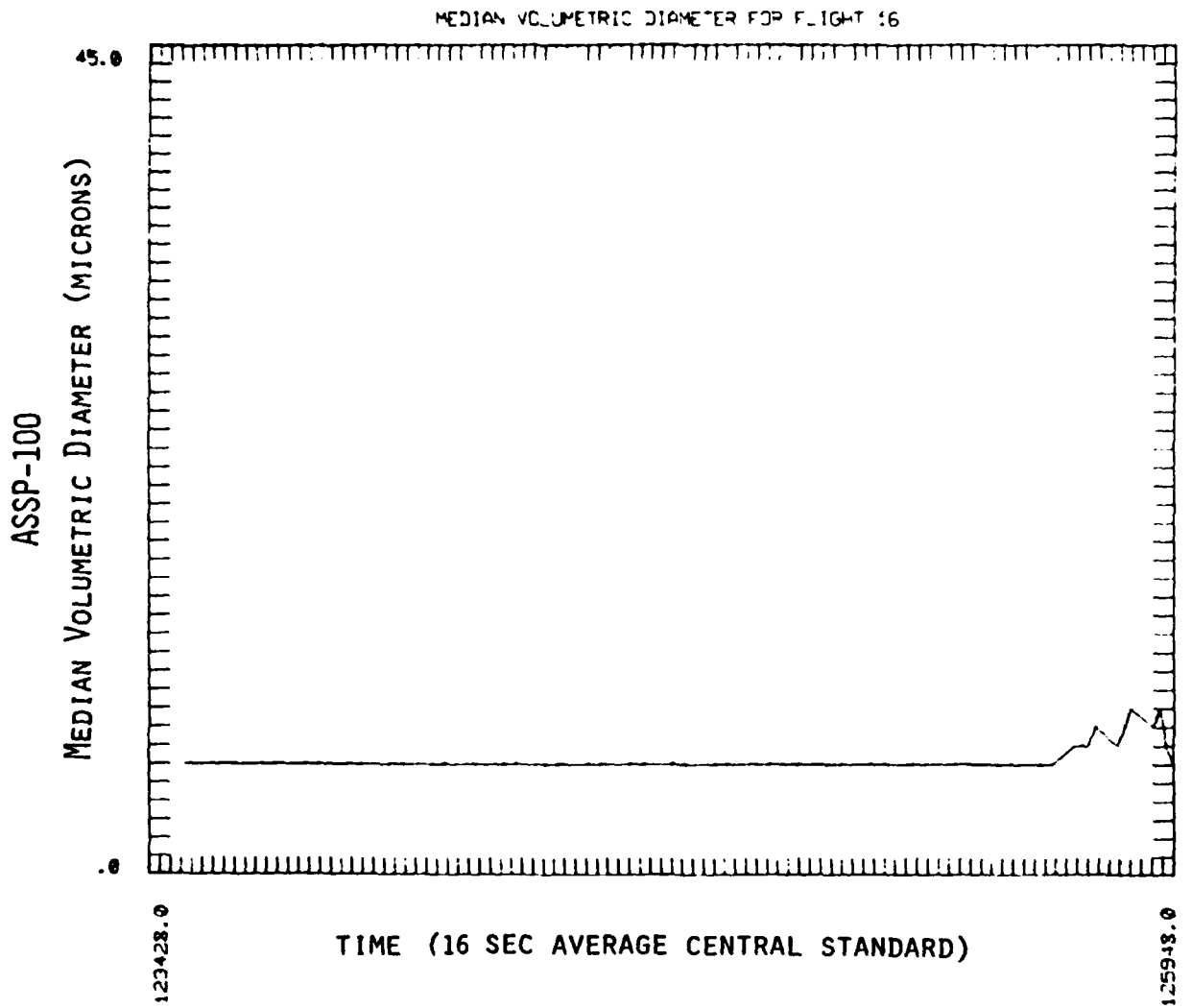
NATURAL ICING ENCOUNTER FLIGHT 14
AIRCRAFT STATE PARAMETERS (JUN-1M 31A)

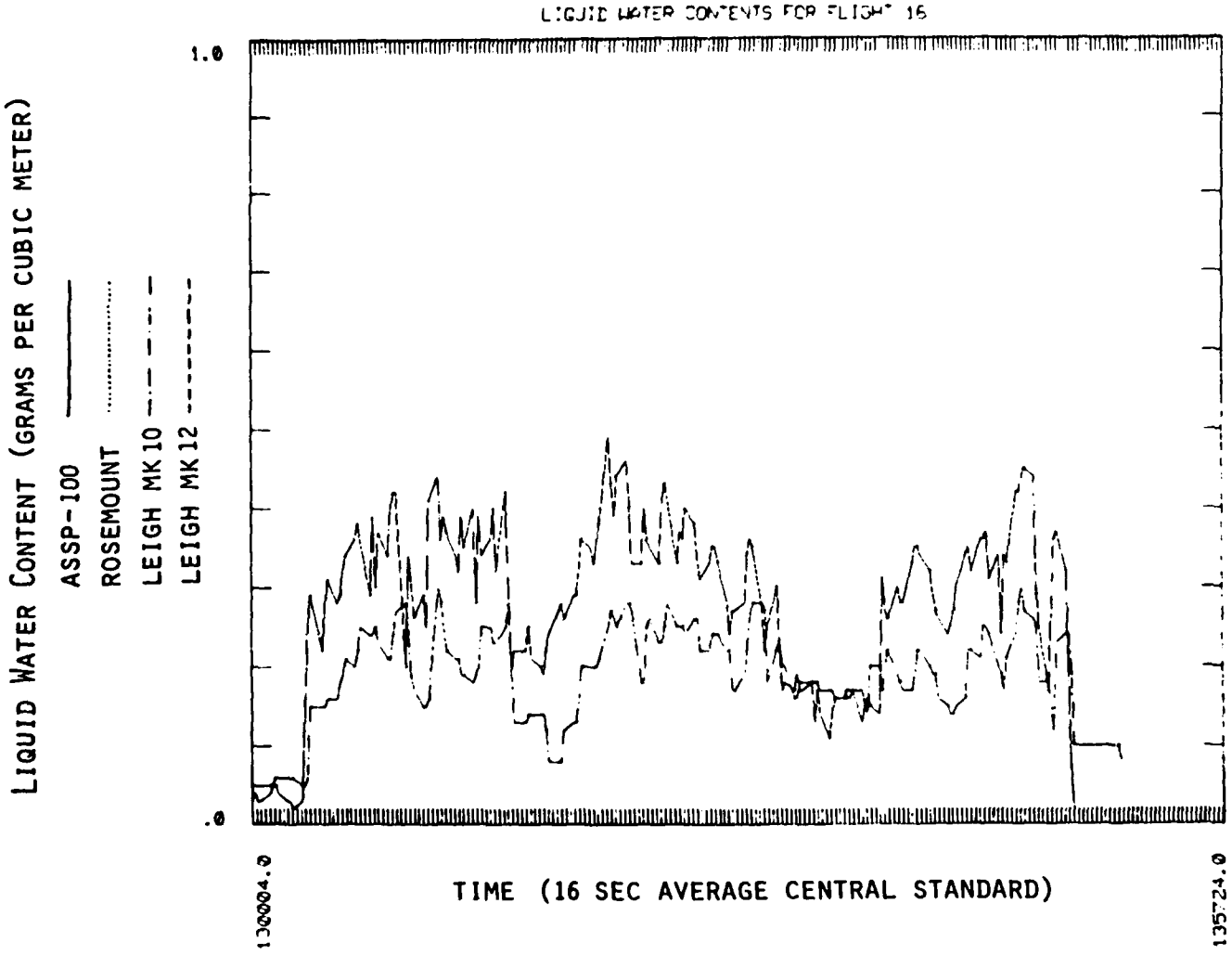
TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
91330	29.0	2687.	5.30	90.3	77.
91352	29.0	2680.	5.30	90.2	77.0

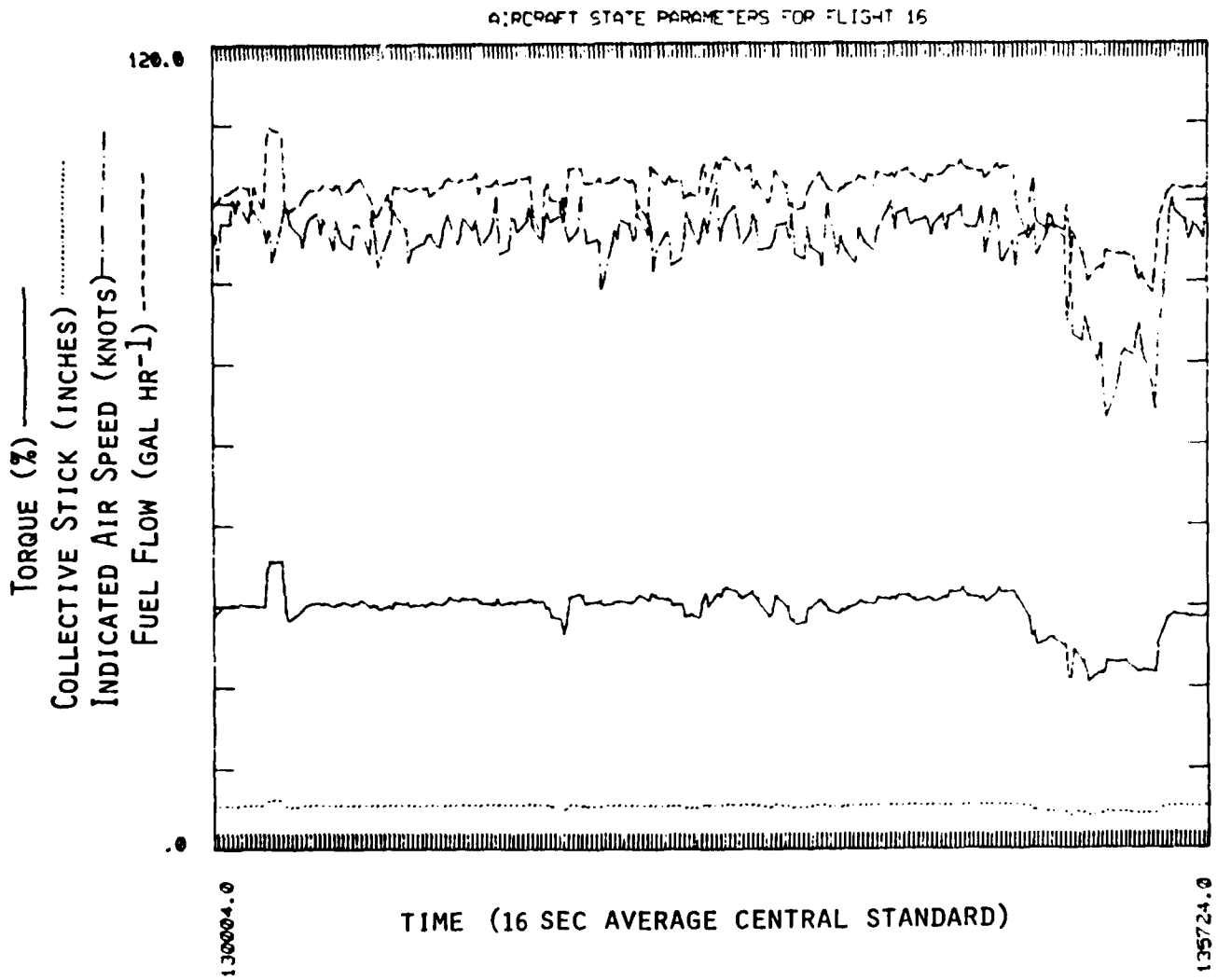


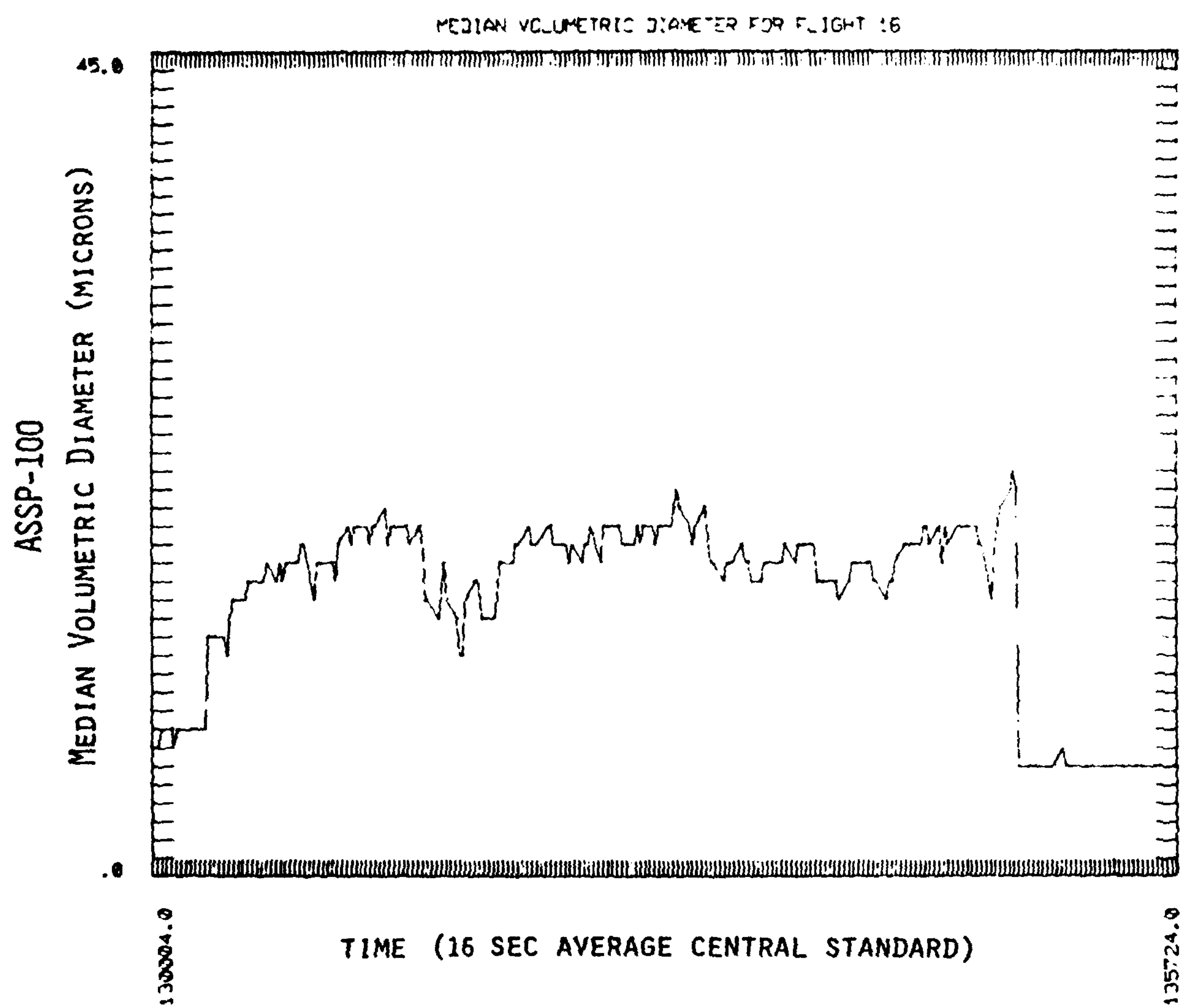
LIQUID WATER CONTENTS FOR FLIGHT 16
LIQUID WATER CONTENT (GRAMS PER CUBIC METER)
ASSP-100
ROSEMOUNT
LEIGH MK 10
LEIGH MK 12
1.0
.0
123428.0
125948.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)


AIRCRAFT STATE PARAMETERS FOR FLIGHT :6
120.0
.0
TORQUE (%)
COLLECTIVE STICK (INCHES)
INDICATED AIR SPEED (KNOTS)
FUEL FLOW (GAL HR-1)
123428.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)
125948.0


MEDIAN VOLUMETRIC DIAMETER FOR FLIGHT 16
45.0
.0
ASSP-100
MEDIAN VOLUMETRIC DIAMETER (MICRONS)
123428.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)
125948.0


LIQUID WATER CONTENTS FOR FLIGHT 16
LIQUID WATER CONTENT (GRAMS PER CUBIC METER)
ASSP-100
ROSEMOUNT
LEIGH MK 10
LEIGH MK 12
1.0
.0
130004.0
135724.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)


AIRCRAFT STATE PARAMETERS FOR FLIGHT 16
120.0
.0
TORQUE (%)
COLLECTIVE STICK (INCHES)
INDICATED AIR SPEED (KNOTS)
FUEL FLOW (GAL HR-1)
130004.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)
135724.0


MEDIAN VOLUMETRIC DIAMETER FOR FLIGHT 16
ASSP-100
MEDIAN VOLUMETRIC DIAMETER (MICRONS)
45.0
.0
130004.0
135724.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)

DATE: 2/18/80 NATURAL ICING ENCOUNTER FLIGHT 16 TAPE RECORD # 1

TIME (LST)	IRU (CNTS)	MK 10 (G/M3)	MK 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
123428	0.	0.00	0.00	.6	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
123444	0.	0.00	0.00	.7	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1235 0	0.	0.00	0.00	1.4	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
123516	0.	0.00	0.00	3.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
123532	81.	.18	0.00	3.6	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
123548	12.	1.09	.20	2.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1236 4	0.	.00	0.00	2.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
123620	0.	.00	0.00	3.6	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
123636	0.	.00	0.00	16.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
123652	0.	.00	0.00	39.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1237 8	0.	.00	0.00	65.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
123724	0.	.00	0.00	71.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
123740	0.	.00	0.00	72.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
123756	0.	.00	0.00	72.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
123812	0.	.00	0.00	72.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
123828	0.	.00	0.00	72.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
123844	0.	.00	0.00	72.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1239 0	0.	.00	0.00	72.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
123916	0.	.00	0.00	72.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
123932	0.	.00	0.00	72.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
123948	0.	.00	0.00	72.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1240 4	0.	.00	0.00	72.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
124020	0.	.00	0.00	72.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
124036	0.	.00	0.00	72.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
124052	0.	.00	0.00	72.3	0.00	.00	6	1.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1241 8	0.	.00	0.00	72.3	0.00	.00	6	2.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
124124	0.	.00	0.00	72.3	0.00	.00	6	4.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
124140	0.	.00	0.00	72.3	0.00	.00	6	5.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
124156	0.	.00	0.00	72.3	0.00	.00	6	5.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
124212	0.	.00	0.00	72.3	0.00	.00	6	4.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
124228	0.	.00	0.00	72.3	0.00	.00	6	4.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
124244	0.	.00	0.00	72.3	0.00	.00	6	4.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1243 0	0.	.00	0.00	72.3	0.00	.00	6	4.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
124316	0.	.00	0.00	72.3	0.00	.00	6	6.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
124332	0.	.00	0.00	72.4	0.00	.00	6	6.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
124348	0.	.00	0.00	72.3	0.00	.00	6	6.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1244 4	0.	.00	0.00	72.3	0.00	.00	6	5.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
124420	0.	.00	0.00	72.3	0.00	.00	6	4.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
124436	0.	.00	0.00	72.3	0.00	.00	6	3.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
124452	0.	.00	0.00	72.3	0.00	.00	6	3.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1245 8	0.	.00	0.00	72.3	0.00	.00	6	2.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
124524	0.	.00	0.00	72.3	0.00	.00	6	2.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
124540	0.	.00	0.00	72.3	0.00	.00	6	1.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
124556	0.	.00	0.00	72.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
124612	0.	.00	0.00	72.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
124628	0.	.00	0.00	61.6	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
124644	0.	.00	0.00	17.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1247 0	0.	.00	0.00	6.9	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
124716	0.	.00	0.00	3.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
124732	0.	.00	0.00	2.0	0.00	.00	6	1.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0

DATE: 2/18/80 NATURAL ICING ENCOUNTER FLIGHT 16 TAPE RECORD # 51

TIME (LST)	IRU (CNTS)	MK 10 (G/M3)	MK 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
12474A	0.	.00	0.00	.9	0.00	.00	6	1.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1248 4	0.	.00	0.00	-.1	0.00	.00	6	1.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
124820	0.	.00	0.00	-.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
124836	0.	.00	0.00	-1.0	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
124852	0.	.00	0.00	-1.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1249 8	0.	.00	0.00	-2.1	0.00	.00	6	10.	0	96	3	0	0	0	0	0	0	0	0	0	0	0	0
124924	0.	.00	0.00	-2.7	0.00	.00	6	5.	0	93	6	0	0	0	0	0	0	0	0	0	0	0	0
124940	0.	.00	0.00	-3.2	0.00	.00	6	24.	0	92	7	0	0	0	0	0	0	0	0	0	0	0	0
124956	0.	.00	0.00	-3.2	0.00	.00	6	8.	0	96	3	0	0	0	0	0	0	0	0	0	0	0	0
125012	0.	.00	0.00	-3.4	0.00	.01	6	42.	0	90	7	1	0	0	0	0	0	0	0	0	0	0	0
125028	0.	.00	0.00	-3.3	0.00	.00	6	3.	0	91	8	0	0	0	0	0	0	0	0	0	0	0	0
125044	0.	.00	0.00	-3.2	0.00	.00	6	1.	0	93	6	0	0	0	0	0	0	0	0	0	0	0	0
1251 0	0.	.00	0.00	-3.2	0.00	.00	6	3.	0	94	5	0	0	0	0	0	0	0	0	0	0	0	0
125116	0.	.00	0.00	-3.1	0.00	.00	6	2.	0	95	4	0	0	0	0	0	0	0	0	0	0	0	0
125132	0.	.00	0.00	-3.3	0.00	.00	6	1.	0	92	7	0	0	0	0	0	0	0	0	0	0	0	0
12514A	0.	.00	0.00	-3.3	0.00	.00	6	1.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1252 4	0.	.00	0.00	-3.4	0.00	.00	6	1.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
125220	0.	.00	0.00	-3.4	0.00	.00	6	2.	0	82	7	9	0	0	0	0	0	0	0	0	0	0	0
125236	0.	.00	0.00	-3.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
125252	0.	.00	0.00	-3.3	0.00	.00	6	1.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1253 8	0.	.00	0.00	-3.4	0.00	.00	6	1.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
125324	0.	.00	0.00	-3.3	0.00	.00	6	1.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
125340	0.	.00	0.00	-3.4	0.00	.00	6	1.	0	92	7	0	0	0	0	0	0	0	0	0	0	0	0
125356	0.	.00	0.00	-3.4	0.00	.00	6	1.	0	86	13	0	0	0	0	0	0	0	0	0	0	0	0
125412	0.	.00	0.00	-3.4	0.00	.00	6	2.	0	91	8	0	0	0	0	0	0	0	0	0	0	0	0
125428	0.	.00	0.00	-3.3	0.00	.00	6	3.	0	81	11	7	0	0	0	0	0	0	0	0	0	0	0
125444	0.	.00	0.00	-3.2	0.00	.00	6	1.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1255 0	0.	.00	0.00	-3.4	0.00	.00	6	1.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
125516	0.	.00	0.00	-3.5	0.00	.00	6	2.	0	95	4	0	0	0	0	0	0	0	0	0	0	0	0
125532	0.	.00	0.00	-3.5	0.00	.00	6	12.	0	92	5	1	0	0	0	0	0	0	0	0	0	0	0
12554A	0.	.00	0.00	-3.6	0.00	.00	6	7.	0	91	8	0	0	0	0	0	0	0	0	0	0	0	0
1256 4	0.	.00	0.00	-3.7	0.00	.00	6	3.	0	97	2	0	0	0	0	0	0	0	0	0	0	0	0
125620	0.	.00	0.00	-3.6	0.00	.00	6	22.	0	86	11	2	0	0	0	0	0	0	0	0	0	0	0
125636	0.	.00	0.00	-3.7	0.00	.02	6	165.	0	83	15	0	0	0	0	0	0	0	0	0	0	0	0
125652	0.	.00	0.00	-4.0	0.00	.03	6	181.	0	65	32	1	0	0	0	0	0	0	0	0	0	0	0
1257 8	0.	.00	.02	-3.8	0.00	.05	7	316.	0	58	35	4	0	0	0	0	0	0	0	0	0	0	0
125724	0.	.00	.07	-3.4	0.00	.05	7	257.	0	45	43	8	1	0	0	0	0	0	0	0	0	0	0
125740	0.	.00	.14	-3.4	0.00	.06	7	332.	0	44	41	10	1	0	0	0	0	0	0	0	0	0	0
125756	0.	.00	.23	-3.6	0.00	.04	8	202.	0	34	54	8	1	0	0	0	0	0	0	0	0	0	0
125812	2.	.01	.33	-3.4	0.00	.05	7	322.	0	55	37	6	0	0	0	0	0	0	0	0	0	0	0
125828	13.	.05	.30	-2.6	0.00	.05	8	212.	0	27	56	12	2	0	0	0	0	0	0	0	0	0	0
125844	13.	.05	.04	-3.9	0.00	.06	9	181.	0	10	71	14	2	0	0	0	0	0	0	0	0	0	0
1259 0	14.	.05	.13	-3.4	0.00	.07	8	293.	0	31	56	9	1	0	0	0	0	0	0	0	0	0	0
125916	14.	.05	.25	-3.8	0.00	.06	9	193.	0	12	74	11	1	0	0	0	0	0	0	0	0	0	0
125932	14.	.05	.35	-3.3	0.00	.05	7	294.	0	47	41	8	1	0	0	0	0	0	0	0	0	0	0
12594A	28.	.05	.42	-3.2	0.00	.04	6	233.	0	61	30	5	1	0	0	0	0	0	0	0	0	0	0
13 0 4	36.	.05	.52	-2.7	0.00	.03	7	173.	0	49	38	8	2	0	0	0	0	0	0	0	0	0	0
13 020	36.	.05	.02	-2.7	0.00	.04	7	222.	0	57	34	6	1	0	0	0	0	0	0	0	0	0	0
13 036	36.	.05	.07	-3.1	0.00	.03	7	175.	0	42	51	5	0	0	0	0	0	0	0	0	0	0	0
13 052	36.	.05	.16	-3.4	0.00	.03	8	100.	0	22	72	4	0	0	0	0	0	0	0	0	0	0	0

DATE: 2/18/80 NATURAL ICING ENCOUNTER FLIGHT 16 TAPE RECORD # 101

TIME (LST)	IRU (CNTS)	MK 10 (G/M3)	MK 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
13 1 8	36.	.05	.26	-3.9	0.00	.04	8	191.	0	30	63	5	0	0	0	0	0	0	0	0	0	0	0
13 124	36.	.05	.39	-3.7	0.00	.05	7	294.	0	47	45	5	0	0	0	0	0	0	0	0	0	0	0
13 140	47.	.06	.22	-3.4	0.00	.05	8	206.	0	31	59	7	1	0	0	0	0	0	0	0	0	0	0
13 156	47.	.06	.08	-3.5	0.00	.04	8	187.	0	28	62	7	1	0	0	0	0	0	0	0	0	0	0
13 212	47.	.06	.17	-3.6	0.00	.03	8	105.	0	12	77	7	1	0	0	0	0	0	0	0	0	0	0
13 228	47.	.06	.27	-3.7	0.00	.03	8	112.	0	19	73	5	0	0	0	0	0	0	0	0	0	0	0
13 244	47.	.06	.36	-3.2	0.00	.02	8	86.	0	16	74	6	1	0	0	0	0	0	0	0	0	0	0
13 3 0	58.	.05	.28	-3.3	0.00	.03	8	115.	0	24	65	6	1	0	0	0	0	0	0	0	0	0	0
13 316	61.	.05	.08	-2.4	0.00	.13	13	262.	0	11	23	16	14	12	11	5	3	1	0	0	0	0	0
13 332	61.	.06	.31	-2.0	0.00	.24	13	429.	0	9	21	19	15	13	11	5	2	0	0	0	0	0	0
13 348	94.	.15	.10	-2.3	0.00	.29	13	497.	0	8	20	20	15	13	11	5	2	0	0	0	0	0	0
13 4 4	97.	.15	.36	-2.0	0.00	.24	13	394.	0	7	19	23	19	15	9	3	0	0	0	0	0	0	0
13 420	117.	.15	.05	-1.9	0.00	.22	12	404.	0	8	23	25	19	13	7	1	0	0	0	0	0	0	0
13 436	117.	.15	.28	-1.9	0.00	.28	14	408.	0	6	17	20	19	17	12	4	1	0	0	0	0	0	0
13 452	142.	.16	.08	-1.9	0.00	.31	15	394.	0	5	13	17	20	19	15	5	1	0	0	0	0	0	0
13 5 8	146.	.16	.33	-1.9	0.00	.28	15	364.	0	5	13	17	20	19	14	5	2	0	0	0	0	0	0
13 524	173.	.18	.09	-1.7	0.00	.29	15	346.	0	5	13	17	19	19	15	7	2	0	0	0	0	0	0
13 540	181.	.19	.26	-1.8	0.00	.32	16	348.	0	4	11	15	18	21	17	8	3	0	0	0	0	0	0
13 556	202.	.21	.17	-1.8	0.00	.34	16	357.	0	4	11	15	18	20	17	8	3	0	0	0	0	0	0
13 612	218.	.20	.20	-2.0	0.00	.36	16	442.	0	5	13	16	15	17	16	9	4	1	0	0	0	0	0
13 628	235.	.22	.23	-2.1	0.00	.38	16	455.	0	5	11	14	15	18	17	9	4	1	0	0	0	0	0
13 644	254.	.25	.18	-1.9	0.00	.36	17	357.	0	3	10	14	16	20	18	9	4	1	0	0	0	0	0
13 7 0	277.	.24	.11	-1.8	0.00	.29	16	318.	0	4	11	15	18	20	17	8	2	0	0	0	0	0	0
13 716	284.	.24	.27	-1.8	0.00	.39	17	392.	0	4	10	13	15	19	18	10	5	1	0	0	0	0	0
13 732	297.	.25	.05	-1.7	0.00	.30	16	323.	0	4	12	14	17	20	18	8	3	0	0	0	0	0	0
13 748	305.	.23	.23	-1.8	0.00	.37	17	354.	0	3	9	12	15	19	19	11	5	1	0	0	0	0	0
13 8 4	327.	.21	.19	-1.8	0.00	.34	17	346.	0	4	10	12	16	20	19	10	4	1	0	0	0	0	0
13 820	346.	.21	.16	-1.9	0.00	.40	17	358.	0	3	9	12	15	19	19	12	6	1	0	0	0	0	0
13 836	364.	.24	.21	-1.9	0.00	.42	18	368.	0	3	7	10	14	19	20	12	6	2	1	0	0	0	0
13 852	387.	.27	.22	-2.0	0.00	.42	18	385.	0	4	7	10	14	19	19	13	7	2	1	0	0	0	0
13 9 8	408.	.28	.09	-1.7	0.00	.20	15	282.	0	6	15	18	16	16	14	7	3	0	0	0	0	0	0
13 924	415.	.25	.25	-1.7	0.00	.34	17	308.	0	3	8	11	15	20	20	11	5	1	0	0	0	0	0
13 940	438.	.19	.18	-1.7	0.00	.31	17	286.	0	3	8	12	16	20	19	12	4	1	0	0	0	0	0
13 956	447.	.17	.25	-1.7	0.00	.26	17	280.	0	4	10	13	16	18	18	11	4	1	0	0	0	0	0
131012	460.	.15	.14	-1.7	0.00	.29	17	330.	0	5	10	13	15	18	17	11	5	1	0	0	0	0	0
131028	468.	.15	.27	-1.7	0.00	.25	16	308.	0	5	13	17	15	16	15	9	4	1	0	0	0	0	0
131044	484.	.16	.22	-1.9	0.00	.41	18	481.	0	6	11	9	12	17	18	12	7	2	1	0	0	0	0
1311 0	516.	.30	.16	-2.0	0.00	.44	19	418.	0	4	7	8	12	17	19	14	8	3	1	0	0	0	0
131116	538.	.28	.13	-1.9	0.00	.36	18	355.	0	5	7	9	14	19	20	13	7	2	0	0	0	0	0
131132	548.	.25	.22	-1.9	0.00	.39	19	318.	0	3	5	8	13	18	20	15	8	3	1	0	0	0	0
131148	559.	.22	.18	-1.8	0.00	.37	19	312.	0	4	6	9	13	18	20	14	8	3	1	0	0	0	0
1312 4	577.	.21	.12	-1.7	0.00	.34	19	274.	0	3	6	9	14	19	19	14	8	2	0	0	0	0	0
131220	583.	.21	.25	-1.6	0.00	.32	18	253.	0	3	6	10	14	19	20	14	7	2	0	0	0	0	0
131236	608.	.19	.08	-1.7	0.00	.39	19	327.	0	4	6	8	12	17	19	15	9	3	1	0	0	0	0
131252	614.	.19	.27	-1.7	0.00	.35	19	288.	0	3	6	8	13	17	19	15	9	4	1	0	0	0	0
1313 8	638.	.18	.16	-1.8	0.00	.40	20	298.	0	3	5	7	11	17	20	15	10	5	1	0	0	0	0
131324	650.	.19	.19	-1.7	0.00	.28	18	275.	0	4	8	10	13	18	19	13	7	2	0	0	0	0	0
131340	662.	.20	.25	-1.8	0.00	.39	19	324.	0	3	7	8	12	17	19	15	10	3	1	0	0	0	0
131356	691.	.25	0.00	-1.8	0.00	.34	19	289.	0	4	7	9	12	18	20	15	8	3	0	0	0	0	0
131412	691.	.25	.24	-1.8	0.00	.36	19	325.	0	4	8	8	12	16	20	15	9	3	1	0	0	0	0

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TIME (LST)	IRU (CNTS)	MR 10 (G/M3)	MR 12 (G/M3)	OAT (C)	RSMI (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/LM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
131428	724.	.23	0.00	-1.8	0.00	.40	19	315.	0	3	6	8	11	16	19	15	10	4	1	0	0	0	0
131444	727.	.23	0.00	-1.8	0.00	.32	18	308.	0	4	8	10	13	18	19	14	7	2	0	0	0	0	0
1315 0	744.	.25	.21	-1.8	0.00	.42	19	384.	0	4	7	7	11	16	19	16	10	4	1	0	0	0	0
131516	785.	.28	.21	-1.8	0.00	.29	18	291.	0	5	8	10	13	18	18	13	7	2	1	0	0	0	0
131532	791.	.20	.34	-1.7	0.00	.20	15	277.	0	7	12	16	17	18	15	8	2	0	0	0	0	0	0
131548	801.	.13	0.00	-1.6	0.00	.22	15	290.	0	6	13	16	16	18	16	8	2	0	0	0	0	0	0
1316 4	801.	.13	.06	-1.5	0.00	.22	14	304.	0	6	14	19	19	17	13	6	2	0	0	0	0	0	0
131620	801.	.13	.28	-1.5	0.00	.22	15	268.	0	5	12	17	19	18	14	7	2	0	0	0	0	0	0
131636	832.	.14	.05	-1.5	0.00	.25	17	239.	0	4	9	12	15	18	19	12	6	1	0	0	0	0	0
131652	837.	.14	0.00	-1.6	0.00	.21	15	282.	0	6	13	17	18	17	14	7	2	0	0	0	0	0	0
1317 8	837.	.14	.10	-1.5	0.00	.20	14	306.	0	7	17	21	19	15	11	5	1	0	0	0	0	0	0
131724	837.	.14	.17	-1.4	0.00	.19	12	379.	0	10	22	28	22	10	4	0	0	0	0	0	0	0	0
131740	842.	.12	.26	-1.4	0.00	.22	12	358.	0	7	19	28	23	12	6	1	0	0	0	0	0	0	0
131756	863.	.08	0.00	-1.6	0.00	.24	15	312.	0	6	13	16	18	17	15	8	3	0	0	0	0	0	0
131812	863.	.08	.01	-1.7	0.00	.27	16	336.	0	6	11	16	17	16	14	9	5	1	0	0	0	0	0
131828	863.	.08	.28	-1.6	0.00	.28	16	326.	0	5	11	16	17	16	14	9	5	1	0	0	0	0	0
131844	882.	.12	.20	-1.8	0.00	.26	14	332.	0	4	13	23	25	17	9	3	1	0	0	0	0	0	0
1319 0	892.	.13	0.00	-1.9	0.00	.29	14	332.	0	3	11	22	27	20	10	2	0	0	0	0	0	0	0
131916	894.	.13	.07	-1.8	0.00	.29	14	347.	0	4	12	23	26	18	9	3	1	0	0	0	0	0	0
131932	906.	.16	.22	-1.9	0.00	.32	15	334.	0	3	10	18	21	17	12	7	4	1	0	0	0	0	0
131948	931.	.20	0.00	-1.8	0.00	.36	17	322.	0	3	9	15	17	15	14	10	7	3	1	0	0	0	0
1320 4	931.	.20	.28	-1.7	0.00	.35	17	342.	0	4	9	14	15	15	15	11	8	4	1	0	0	0	0
132020	954.	.20	.07	-1.6	0.00	.33	17	309.	0	3	9	14	15	15	15	11	8	3	1	0	0	0	0
132036	959.	.20	.18	-1.6	0.00	.35	18	290.	0	2	8	13	14	15	15	12	9	4	2	0	0	0	0
132052	967.	.21	.20	-1.6	0.00	.38	18	293.	0	2	8	13	14	14	14	12	9	5	2	1	0	0	0
1321 8	979.	.25	.15	-2.2	0.00	.49	19	390.	0	2	7	13	15	13	14	12	10	6	3	1	0	0	0
132124	988.	.27	.14	-2.1	0.00	.43	18	337.	0	2	8	14	14	14	14	12	9	5	2	1	0	0	0
132140	993.	.26	.21	-2.0	0.00	.39	18	307.	0	2	8	14	15	14	13	11	9	5	2	1	0	0	0
132156	550.	.25	.22	-2.3	0.00	.44	18	367.	0	3	9	13	13	13	13	11	10	6	3	1	0	0	0
132212	28.	.28	.11	-2.4	0.00	.46	19	331.	0	1	7	13	14	13	13	11	10	6	3	1	0	0	0
132228	47.	.28	.14	-1.8	0.00	.40	19	266.	0	1	7	13	14	13	14	13	10	6	3	1	0	0	0
132244	57.	.27	.31	-1.4	0.00	.33	18	242.	0	1	7	14	16	15	14	11	9	5	2	0	0	0	0
1323 0	81.	.18	0.00	-1.3	0.00	.33	18	242.	0	1	7	15	16	15	14	11	8	5	2	0	0	0	0
132316	81.	.18	.13	-1.5	0.00	.40	18	302.	0	2	7	13	15	14	14	11	9	5	3	1	0	0	0
132332	115.	.25	.12	-1.9	0.00	.36	17	376.	0	5	8	14	15	14	14	10	8	4	2	0	0	0	0
132348	134.	.26	.27	-1.6	0.00	.35	18	281.	0	2	7	13	15	15	15	11	8	4	2	0	0	0	0
1324 4	161.	.23	.12	-1.4	0.00	.33	17	242.	0	1	7	15	17	16	14	11	8	4	2	0	0	0	0
132420	177.	.23	.16	-1.9	0.00	.41	18	325.	0	2	8	13	14	14	13	11	9	5	3	1	0	0	0
132436	195.	.25	.22	-2.8	0.00	.43	18	444.	0	3	13	15	10	9	11	11	10	6	4	1	0	0	0
132452	217.	.28	.27	-2.4	0.00	.41	19	341.	0	3	9	12	13	13	14	12	10	5	3	1	0	0	0
1325 8	241.	.25	.09	-1.8	0.00	.33	17	249.	0	2	7	14	17	16	14	10	7	4	2	0	0	0	0
132524	259.	.25	.18	-2.5	0.00	.37	19	381.	0	4	13	13	10	10	11	11	10	7	4	2	0	0	0
132540	276.	.25	.24	-2.7	0.00	.36	19	339.	0	3	12	13	11	10	12	11	10	6	4	1	0	0	0
132556	297.	.24	.18	-2.2	0.00	.40	19	313.	0	2	8	12	12	13	14	12	10	6	3	1	0	0	0
132612	320.	.26	.05	-1.9	0.00	.38	19	253.	0	1	6	11	14	14	15	13	10	6	3	1	0	0	0
132628	325.	.26	.28	-1.7	0.00	.33	18	236.	0	2	6	13	15	15	14	12	9	5	3	0	0	0	0
132644	357.	.22	.01	-1.6	0.00	.31	18	230.	0	2	6	13	17	16	14	11	8	5	2	0	0	0	0
1327 0	360.	.22	.27	-1.5	0.00	.33	18	264.	0	3	6	12	16	16	14	11	9	5	2	1	0	0	0
132716	395.	.24	0.00	-1.8	0.00	.35	19	279.	0	3	6	12	14	14	14	12	10	6	3	1	0	0	0
132732	396.	.24	.25	-2.0	0.00	.35	18	296.	0	3	7	12	14	14	14	13	10	5	2	0	0	0	0

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TIME (LST)	IRU (CNTS)	MR 10 (G/M3)	MR 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
132748	432.	.24	.17	-2.0	0.00	.33	19	238.	0	2	6	12	14	14	14	12	10	6	3	0	0	0	0
1328 4	448.	.22	.13	-1.7	0.00	.28	19	193.	0	1	6	12	14	15	14	13	10	5	2	1	0	0	0
132820	456.	.22	.25	-1.4	0.00	.24	18	180.	0	2	7	12	15	15	15	13	9	5	2	0	0	0	0
132836	475.	.17	.16	-1.5	0.00	.27	19	197.	0	2	6	11	13	14	16	14	11	6	2	0	0	0	0
132852	486.	.17	.27	-1.7	0.00	.27	19	213.	0	3	6	11	14	15	16	13	10	4	2	0	0	0	0
1329 8	505.	.19	.12	-1.7	0.00	.28	19	208.	0	2	6	10	12	14	15	15	11	5	2	0	0	0	0
132924	522.	.22	.19	-2.3	0.00	.34	20	252.	0	2	7	10	12	12	14	14	12	7	3	1	0	0	0
132940	545.	.26	.18	-2.4	0.00	.36	21	223.	0	2	6	10	11	12	14	15	13	8	4	1	0	0	0
132956	563.	.28	.23	-2.5	0.00	.35	20	242.	0	2	6	10	11	12	14	15	12	8	4	1	0	0	0
133012	591.	.28	.02	-2.0	0.00	.27	19	193.	0	2	6	11	13	15	16	14	11	5	2	0	0	0	0
13302B	591.	.27	.31	-1.8	0.00	.22	18	171.	0	2	7	12	15	17	17	13	8	3	1	0	0	0	0
133044	618.	.18	.10	-1.9	0.00	.25	19	196.	0	3	6	11	1	16	17	14	9	4	1	0	0	0	0
1331 0	633.	.22	.18	-2.7	0.00	.30	20	271.	0	4	7	9	10	11	14	14	13	7	3	1	0	0	0
133116	647.	.23	.30	-2.0	0.00	.22	18	188.	0	3	7	12	14	16	16	13	9	4	1	0	0	0	0
133132	671.	.20	.08	-1.7	0.00	.17	17	155.	0	3	8	15	18	19	16	10	5	1	0	0	0	0	0
133148	671.	.20	.31	-1.7	0.00	.18	17	253.	0	9	9	11	15	16	15	11	5	2	0	0	0	0	0
1332 4	695.	.16	.07	-1.8	0.00	.17	16	282.	0	12	10	10	13	16	16	11	6	2	0	0	0	0	0
133220	696.	.16	.29	-1.8	0.00	.19	17	287.	0	11	9	9	12	15	16	12	7	3	1	0	0	0	0
133236	723.	.18	0.00	-1.8	0.00	.17	17	270.	0	11	8	9	12	16	16	12	7	3	1	0	0	0	0
133252	723.	.18	.12	-1.8	0.00	.17	17	240.	0	10	9	10	13	16	17	12	6	3	1	0	0	0	0
1333 8	730.	.18	.24	-1.9	0.00	.18	18	223.	0	8	7	10	14	17	17	13	7	3	0	0	0	0	0
133324	739.	.18	.04	-1.8	0.00	.13	17	162.	0	6	10	13	16	16	16	11	5	2	0	0	0	0	0
133340	739.	.18	.31	-1.8	0.00	.17	17	211.	0	7	8	11	14	16	16	12	7	3	1	0	0	0	0
133356	768.	.17	.02	-1.7	0.00	.14	16	164.	0	6	10	15	17	18	15	9	5	1	0	0	0	0	0
133412	769.	.17	.04	-1.6	0.00	.11	16	162.	0	8	11	15	16	17	14	9	5	2	0	0	0	0	0
13342B	769.	.17	.29	-2.3	0.00	.14	17	244.	0	14	10	8	11	15	16	11	7	3	1	0	0	0	0
133444	781.	.16	.06	-1.9	0.00	.16	17	244.	0	11	9	10	13	16	16	11	6	2	1	0	0	0	0
1335 0	783.	.16	.25	-1.9	0.00	.16	17	205.	0	8	9	10	13	17	17	12	6	2	0	0	0	0	0
133516	803.	.17	.16	-1.8	0.00	.16	17	191.	0	7	9	11	14	17	17	11	6	2	0	0	0	0	0
133532	810.	.17	.27	-1.8	0.00	.16	17	185.	0	6	9	12	15	17	16	12	6	2	0	0	0	0	0
133548	829.	.17	.10	-1.9	0.00	.17	18	199.	0	6	9	10	12	16	17	13	8	3	1	0	0	0	0
1336 4	833.	.17	.24	-1.8	0.00	.13	17	155.	0	6	8	11	14	17	17	12	7	2	0	0	0	0	0
133620	847.	.15	.20	-1.8	0.00	.15	18	168.	0	6	7	10	13	16	17	13	9	3	1	0	0	0	0
133636	856.	.14	.27	-2.0	0.00	.16	18	181.	0	6	8	10	12	16	17	13	8	3	1	0	0	0	0
133652	876.	.20	.09	-1.8	0.00	.15	18	148.	0	5	7	9	13	17	17	14	9	3	1	0	0	0	0
1337 8	878.	.20	.32	-1.9	0.00	.14	18	170.	0	7	10	10	13	16	17	12	7	3	0	0	0	0	0
133724	898.	.17	.10	-2.2	0.00	.31	16	440.	0	8	14	13	12	14	15	10	6	2	1	0	0	0	0
133740	908.	.20	.23	-1.9	0.00	.27	16	299.	0	4	12	15	16	16	15	10	5	2	0	0	0	0	0
133756	918.	.22	.16	-1.8	0.00	.26	16	310.	0	5	12	15	16	17	16	10	4	1	0	0	0	0	0
133812	928.	.19	.20	-1.9	0.00	.30	16	376.	0	6	12	14	15	16	16	10	5	2	0	0	0	0	0
13382B	937.	.18	.22	-1.9	0.00	.28	16	362.	0	6	12	15	15	16	15	9	5	1	0	0	0	0	0
133844	947.	.17	.14	-2.1	0.00	.28	15	396.	0	7	13	17	17	16	14	8	3	1	0	0	0	0	0
1339 0	951.	.17	.29	-2.2	0.00	.33	16	408.	0	6	12	15	15	16	15	10	5	1	0	0	0	0	0
133916	965.	.19	.14	-2.5	0.00	.35	17	431.	0	6	12	13	13	15	16	11	6	2	1	0	0	0	0
133932	973.	.22	.17	-2.6	0.00	.35	17	406.	0	5	12	13	14	15	16	11	6	2	0	0	0	0	0
13394B	979.	.22	.26	-2.6	0.00	.34	17	393.	0	5	12	14	14	16	16	11	6	2	0	0	0	0	0
1340 4	986.	.20	.20	-2.3	0.00	.32	17	314.	0	3	10	14	15	17	16	11	6	2	0	0	0	0	0
134020	991.	.19	.20	-2.1	0.00	.29	17	300.	0	4	10	14	16	17	16	10	5	2	0	0	0	0	0
134036	994.	.19	.28	-2.0	0.00	.27	16	279.	0	4	10	16	17	17	16	10	4	1	0	0	0	0	0
134052	998.	.16	.15	-2.0	0.00	.26	16	381.	0	9	11	14	16	17	15	9	4	1	0	0	0	0	0

DATE: 2/18/90 NATURAL ICING ENCOUNTER FLIGHT 16 TAPE RECORD # 251

TIME (LST)	IRU (CNTS)	MR 10 (G/M3)	MR 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
1341 8	2.	.15	.24	-2.0	0.00	.24	15	302.	0	5	12	17	17	17	15	8	3	1	0	0	0	0	0
134124	14.	.14	.17	-1.8	0.00	.25	16	274.	0	4	11	15	17	18	16	10	4	1	0	0	0	0	0
134140	22.	.14	.16	-1.8	0.00	.27	16	286.	0	4	11	15	16	18	16	10	4	1	0	0	0	0	0
134156	36.	.15	.17	-2.5	0.00	.30	17	346.	0	5	10	13	14	17	17	11	6	2	0	0	0	0	0
134212	49.	.16	.17	-3.2	0.00	.34	18	392.	0	6	11	11	12	15	16	13	8	3	1	0	0	0	0
134228	74.	.22	.17	-2.9	0.00	.35	18	376.	0	4	11	12	12	15	17	12	7	3	1	0	0	0	0
134244	90.	.22	.24	-3.9	0.00	.32	18	388.	0	5	16	11	10	12	15	12	8	4	1	0	0	0	0
1343 0	107.	.21	.23	-3.8	0.00	.36	18	434.	0	6	13	10	10	13	16	12	9	4	2	0	0	0	0
134316	130.	.25	.13	-3.7	0.00	.36	19	374.	0	4	13	10	10	13	16	13	9	5	2	0	0	0	0
134332	150.	.25	.16	-3.1	0.00	.37	19	368.	0	5	8	9	12	16	18	14	8	3	1	0	0	0	0
13434A	161.	.24	.33	-2.2	0.00	.31	18	289.	0	4	8	11	14	18	19	12	7	2	0	0	0	0	0
1344 8	184.	.20	.09	-2.2	0.00	.34	19	278.	0	3	6	9	13	17	19	14	8	3	1	0	0	0	0
134420	190.	.19	.31	-1.7	0.00	.24	17	211.	0	3	8	13	17	20	18	11	5	1	0	0	0	0	0
134436	208.	.17	.14	-2.2	0.00	.38	19	310.	0	4	6	9	13	17	19	14	8	3	1	0	0	0	0
134452	225.	.21	.17	-2.2	0.00	.33	18	315.	0	5	7	9	13	17	19	14	8	3	1	0	0	0	0
1345 8	242.	.24	.21	-2.8	0.00	.42	19	423.	0	5	8	8	10	14	17	14	10	5	2	0	0	0	0
134524	271.	.28	.21	-3.9	0.00	.42	19	465.	0	5	13	8	9	11	15	13	11	6	3	1	0	0	0
134540	295.	.30	.15	-3.2	0.00	.44	19	434.	0	5	9	8	10	14	17	14	10	5	2	0	0	0	0
134556	318.	.27	.15	-3.3	0.00	.45	19	484.	0	6	10	8	10	14	17	14	10	5	1	0	0	0	0
134612	338.	.26	.18	-2.9	0.00	.44	19	427.	0	5	8	7	10	14	17	14	10	5	2	0	0	0	0
13462A	349.	.25	.34	-2.2	0.00	.29	18	239.	0	3	7	10	14	18	18	14	7	3	1	0	0	0	0
134644	370.	.18	.03	-1.9	0.00	.25	18	212.	0	3	7	12	15	18	18	13	6	2	0	0	0	0	0
1347 0	370.	.18	.17	-1.7	0.00	.17	15	218.	0	6	11	17	19	18	14	7	3	0	0	0	0	0	0
134716	380.	.15	.21	-1.6	0.00	.28	18	257.	0	4	6	10	14	18	19	14	8	3	1	0	0	0	0
134732	396.	.12	.20	-2.3	0.00	.36	19	308.	0	4	5	8	11	15	18	15	10	4	2	0	0	0	0
134748	418.	.23	.12	-3.2	0.00	.37	20	359.	0	5	6	9	11	13	16	14	11	6	3	0	0	0	0
1348 4	435.	.24	.19	-3.4	0.00	.32	21	309.	0	6	7	7	9	11	14	14	12	8	4	1	0	0	0
134820	450.	.24	.20	-3.6	0.00	.18	22	237.	0	10	7	5	6	8	12	13	14	9	7	3	1	0	0
134836	453.	.19	.39	-3.6	0.00	.07	21	144.	0	19	6	4	5	7	11	13	12	8	6	3	1	0	0
134852	468.	.10	.43	-3.9	0.00	.01	6	67.	0	85	12	1	0	0	0	0	0	0	0	0	0	0	0
1349 8	468.	.10	.43	-3.6	0.00	.00	6	1.	0	73	12	14	0	0	0	0	0	0	0	0	0	0	0
134928	465.	.10	.41	-3.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
134940	467.	.10	.40	-2.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
134956	468.	.10	.38	-2.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
135012	468.	.10	.36	-2.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
135028	468.	.10	.34	-2.0	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
135044	468.	.10	.32	-1.9	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1351 0	468.	.10	.30	-1.6	0.00	.00	7	0.	0	54	45	0	0	0	0	0	0	0	0	0	0	0	0
135116	468.	.10	.29	-1.6	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
135132	468.	.08	.28	-1.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
13514A	468.	.00	.26	-1.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1352 4	468.	.00	.25	-1.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
135220	468.	.00	.25	-1.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
135236	468.	.00	.26	-1.6	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
135252	468.	.00	.25	-1.8	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1353 8	468.	.00	.23	-1.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
135324	468.	.00	.22	-1.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
135340	467.	.00	.23	-1.8	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
135356	468.	.00	.23	-1.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
135412	467.	.00	.22	-1.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0

TAPE RECORD # 301

DATE: 2/18/80 NATURAL ICING ENCOUNTER FLIGHT 16

TIME (LST)	IRU (CNTS)	MR 10 (G/M3)	MR 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (P/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
135428	46A.	.00	.23	-1.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
135444	46A.	.00	.22	-1.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1355 0	46A.	.00	.20	-1.9	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
135516	46A.	.00	.18	-2.1	0.00	.00	6	0.	0	70	29	0	0	0	0	0	0	0	0	0	0	0	0
135532	46A.	.00	.16	-2.2	0.00	.00	6	0.	0	67	32	0	0	0	0	0	0	0	0	0	0	0	0
135548	46A.	.00	.14	-2.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1356 4	46A.	.00	.13	-2.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
135620	46A.	.00	.13	-2.2	0.00	.00	6	0.	0	64	35	0	0	0	0	0	0	0	0	0	0	0	0
135636	46A.	.00	.12	-2.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
135652	46A.	.00	.12	-2.3	0.00	.00	6	0.	0	67	32	0	0	0	0	0	0	0	0	0	0	0	0
1357 8	46B.	.00	.11	-2.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
135724	46A.	.00	.09	-2.3	0.00	.00	6	0.															

NATURAL ICING ENCOUNTER FLIGHT 16
AIRCRAFT STATE PARAMETERS (JUN-IH 31A)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
123428	15.2	1115.	1.01	69.3	7.3
123444	18.3	1099.	3.07	73.4	6.6
1235 0	16.7	1115.	1.57	68.9	9.0
123516	14.1	1125.	.27	66.0	9.3
123532	14.0	1125.	.26	66.0	9.7
12354A	13.9	1125.	.27	65.9	7.4
1236 4	13.9	1127.	.27	66.7	7.2
123620	14.0	1127.	.27	66.2	7.4
123636	14.0	1127.	.27	66.5	7.5
123652	14.2	1129.	.27	66.3	7.2
1237 8	14.0	1127.	.27	66.2	7.3
123724	13.9	1125.	.27	66.2	8.3
123740	13.8	1129.	.27	65.7	7.6
123756	13.3	1129.	.27	65.1	7.5
123812	12.6	1129.	.27	64.9	8.0
12382A	13.0	1129.	.27	64.6	7.6
123844	13.4	1131.	.27	65.2	7.4
1239 0	9.1	1131.	.27	50.1	8.7
123916	9.4	1131.	.27	51.2	8.8
123932	9.7	1133.	.27	51.0	8.1
12394A	9.7	1131.	.27	51.1	8.5
1240 4	9.7	1131.	.27	51.4	10.8
124020	9.8	1131.	.27	51.7	8.1
124036	9.8	1131.	.27	52.0	9.1
124052	9.7	1131.	.27	51.3	9.9
1241 8	9.7	1131.	.27	51.7	10.1
124124	9.7	1131.	.27	51.5	10.6
124140	9.9	1133.	.27	51.5	9.0
124156	9.4	1135.	.27	51.6	9.3
124212	11.1	1133.	.27	57.0	8.1
124228	13.8	1133.	.27	66.5	7.8
124244	11.6	1135.	.27	63.0	7.3
1243 0	13.6	1133.	.27	65.6	7.7
124316	13.7	1135.	.36	65.1	7.0
124332	21.7	1107.	3.99	81.4	6.4
124348	34.6	1087.	6.10	97.1	5.9
1244 4	37.0	1097.	6.29	99.7	10.4
124420	31.3	1141.	5.74	91.0	12.2
124436	34.3	1123.	6.08	96.5	5.7
124452	34.8	1097.	6.05	96.1	3.3
1245 8	34.8	1099.	6.10	96.5	6.5
124524	35.2	1099.	6.08	96.4	6.2
124540	34.1	1097.	6.00	95.2	3.4
124556	34.0	1089.	6.06	95.4	4.8
124612	34.8	1091.	6.12	96.6	4.9
12462A	38.4	1143.	6.54	101.8	60.7
124644	40.0	1283.	6.75	104.4	68.6
1247 0	39.8	1504.	6.75	103.6	74.7
124716	38.7	1734.	6.75	101.9	77.0
124732	39.4	1976.	6.75	102.3	78.3

NATURAL ICING ENCOUNTER FLIGHT 1A
AIRCRAFT STATE PARAMETERS (JUN-1M 31A)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
124748	39.1	2254.	6.75	101.3	76.4
1248 4	38.9	2487.	6.75	100.4	72.7
124820	38.3	2738.	6.75	99.2	65.6
124836	38.9	2964.	6.75	99.6	73.4
124852	38.3	3174.	6.78	98.6	71.6
1249 8	38.9	3391.	6.88	98.9	73.8
124924	37.3	3471.	6.62	96.4	91.0
124940	34.5	3464.	6.19	92.7	93.5
124956	34.8	3460.	6.31	93.6	91.8
125012	35.1	3480.	6.34	95.4	91.7
125028	33.5	3462.	6.34	95.6	94.1
125044	35.4	3469.	6.42	97.5	88.7
1251 0	35.6	3467.	6.48	97.9	91.5
125116	36.2	3458.	6.45	98.2	95.3
125132	36.3	3460.	6.43	98.2	94.1
125148	36.1	3453.	6.36	97.8	96.6
1252 4	35.8	3458.	6.33	97.4	94.7
125220	36.1	3464.	6.35	97.7	92.2
125236	36.0	3460.	6.33	97.5	91.0
125252	35.8	3465.	6.33	97.2	92.9
1253 8	36.1	3484.	6.33	97.6	90.6
125324	35.7	3487.	6.33	97.1	92.7
125340	36.0	3471.	6.33	97.5	94.9
125356	35.9	3469.	6.33	97.7	94.7
125412	35.6	3509.	6.34	96.0	89.9
125428	35.6	3500.	6.33	96.2	90.2
125444	35.7	3504.	6.33	96.6	96.1
1255 0	36.0	3494.	6.33	97.8	97.5
125516	35.6	3489.	6.33	96.6	91.8
125532	35.6	3489.	6.33	96.8	91.7
125548	35.8	3466.	6.33	97.8	94.7
1256 4	35.0	3458.	6.34	97.0	96.9
125620	36.0	3500.	6.51	98.5	90.3
125636	41.2	3558.	7.03	105.6	93.9
125652	41.0	3483.	7.02	104.6	92.6
1257 8	41.3	3839.	7.07	105.1	92.4
125724	40.4	3984.	7.02	103.8	91.4
125740	36.6	3993.	6.51	98.5	96.0
125756	35.7	3993.	6.49	97.2	91.6
125812	35.9	4002.	6.48	97.7	93.1
125828	35.1	4008.	6.48	96.8	91.8
125844	36.0	4027.	6.48	94.8	94.0
1259 0	35.4	4048.	6.43	97.0	94.4
125916	35.4	4009.	6.41	96.9	92.8
125932	35.0	3966.	6.34	96.6	95.5
125948	34.7	3927.	6.32	96.0	96.0
13 0 4	34.4	3966.	6.34	95.5	89.5
13 020	35.1	3957.	6.44	96.0	91.3
13 036	35.3	3986.	6.49	96.3	86.0
13 052	36.1	3993.	6.56	97.1	92.9

NATIONAL ICING ENCOUNTER FLIGHT 16
AIRCRAFT STATE PARAMETERS (JUNE)M 318)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
13 1 8	36.2	3966.	6.52	97.7	92.9
13 124	36.3	3998.	6.52	98.1	96.6
13 140	36.1	4009.	6.52	98.2	94.5
13 156	36.3	3991.	6.51	98.6	96.4
13 212	36.0	3975.	6.51	98.2	93.1
13 228	36.2	3971.	6.52	94.9	94.6
13 244	36.0	4007.	6.51	98.3	94.9
13 3 0	36.0	4011.	6.56	94.9	92.7
13 316	41.0	4103.	7.22	105.7	90.1
13 332	42.8	4233.	7.42	107.8	92.0
13 348	42.6	4348.	7.45	107.2	87.2
13 4 4	42.8	4494.	7.40	107.0	92.7
13 420	35.3	4585.	6.48	95.8	95.2
13 436	33.9	4557.	6.30	94.6	95.2
13 452	34.1	4515.	6.33	94.9	92.9
13 5 8	35.2	4480.	6.43	95.7	91.2
13 524	35.7	4480.	6.55	96.5	89.4
13 540	36.2	4466.	6.56	97.3	91.8
13 556	36.3	4469.	6.56	97.8	93.3
13 612	36.5	4462.	6.56	98.0	94.4
13 628	36.3	4464.	6.56	98.1	91.3
13 644	36.5	4436.	6.56	98.8	93.6
13 7 0	36.0	4459.	6.56	98.0	89.0
13 716	36.4	4455.	6.56	98.7	93.3
13 732	36.3	4443.	6.56	98.6	91.7
13 748	36.7	4462.	6.56	97.3	90.2
13 8 4	36.2	4480.	6.56	98.3	89.1
13 820	36.5	4473.	6.56	99.2	92.7
13 836	36.5	4459.	6.56	99.2	92.6
13 852	36.9	4450.	6.56	99.7	92.5
13 9 8	35.9	4494.	6.56	96.7	88.3
13 924	36.3	4457.	6.56	95.9	94.8
13 940	36.0	4452.	6.56	93.9	90.4
13 956	35.6	4508.	6.56	94.0	86.3
131012	36.0	4503.	6.56	97.2	90.7
131028	35.7	4506.	6.56	94.9	91.7
131044	36.5	4485.	6.55	98.3	94.8
1311 0	36.4	4476.	6.56	98.2	92.5
131116	36.5	4446.	6.56	98.2	91.9
131132	36.0	4464.	6.56	97.8	86.8
131148	36.2	4471.	6.56	97.9	89.0
1312 4	36.3	4457.	6.56	98.3	89.7
131220	36.1	4457.	6.56	98.0	89.8
131236	36.3	4469.	6.56	98.3	91.0
131252	36.5	4466.	6.56	96.9	91.2
1313 8	36.3	4480.	6.56	98.2	88.9
131324	36.4	4490.	6.55	98.4	91.3
131340	36.8	4497.	6.59	99.3	92.0
131356	37.3	4471.	6.60	99.6	94.0
131412	36.8	4503.	6.60	99.0	89.6

NATURAL ICING ENCOUNTER FLIGHT 16
AIRCRAFT STATE PARAMETERS (JUN-IN 31P)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
131428	37.1	4503.	6.66	99.3	91.1
131444	37.1	4480.	6.60	99.4	93.6
1315 0	37.1	4469.	6.60	99.6	91.8
131516	37.2	4462.	6.60	100.4	93.2
131532	36.7	4476.	6.60	97.2	90.3
131548	36.4	4492.	6.60	98.5	89.4
1316 4	36.4	4490.	6.60	98.3	91.6
131620	36.2	4464.	6.60	98.8	93.0
131636	37.0	4411.	6.60	99.2	90.6
131652	36.3	4457.	6.67	98.5	88.2
1317 8	36.6	4487.	6.69	98.9	88.9
131724	36.6	4510.	6.69	98.9	93.6
131740	36.4	4501.	6.69	99.0	93.3
131756	36.8	4492.	6.69	99.6	91.5
131812	36.8	4494.	6.69	99.5	93.1
131828	37.1	4483.	6.69	99.9	95.2
131844	36.7	4520.	6.69	94.5	92.4
1319 0	36.7	4559.	6.70	90.4	89.7
131916	35.7	4552.	6.55	97.8	93.0
131932	35.8	4515.	6.50	98.7	94.3
131948	34.4	4483.	6.33	96.2	92.9
1320 4	34.2	4422.	6.29	96.0	93.8
132020	32.0	4351.	5.95	92.9	96.5
132036	33.4	4272.	6.19	94.2	91.6
132052	37.3	4256.	6.68	100.8	90.1
1321 8	37.8	4245.	6.65	101.4	91.8
132124	37.5	4215.	6.55	100.9	96.6
132140	36.4	4176.	6.44	98.8	92.6
132156	36.5	4167.	6.44	98.8	89.8
132212	36.7	4139.	6.44	99.0	90.3
132228	36.7	4116.	6.44	99.3	89.6
132244	36.2	4201.	6.56	98.7	82.3
1323 0	36.4	4206.	6.56	98.9	89.5
132316	36.7	4187.	6.56	99.3	91.6
132332	36.7	4190.	6.56	99.4	90.4
132348	36.8	4194.	6.56	99.8	93.2
1324 4	36.5	4210.	6.56	99.0	92.6
132420	36.7	4213.	6.56	99.3	90.0
132436	37.1	4210.	6.56	98.4	90.6
132452	37.6	4197.	6.57	93.9	95.6
1325 8	36.9	4192.	6.57	91.0	93.6
132524	37.8	4148.	6.56	101.4	92.6
132540	37.5	4178.	6.56	100.7	85.7
132556	37.3	4194.	6.56	100.4	88.4
132612	37.0	4206.	6.56	98.5	91.3
132628	36.9	4215.	6.56	100.0	90.7
132644	36.2	4272.	6.53	99.0	86.5
1327 0	36.3	4323.	6.54	99.2	87.3
132716	34.5	4321.	6.26	96.5	90.7
132732	34.5	4256.	6.22	96.8	94.4

NATURAL ICING ENCOUNTER FLIGHT 16
AIRCRAFT STATE PARAMETERS (JUH-1H 318)

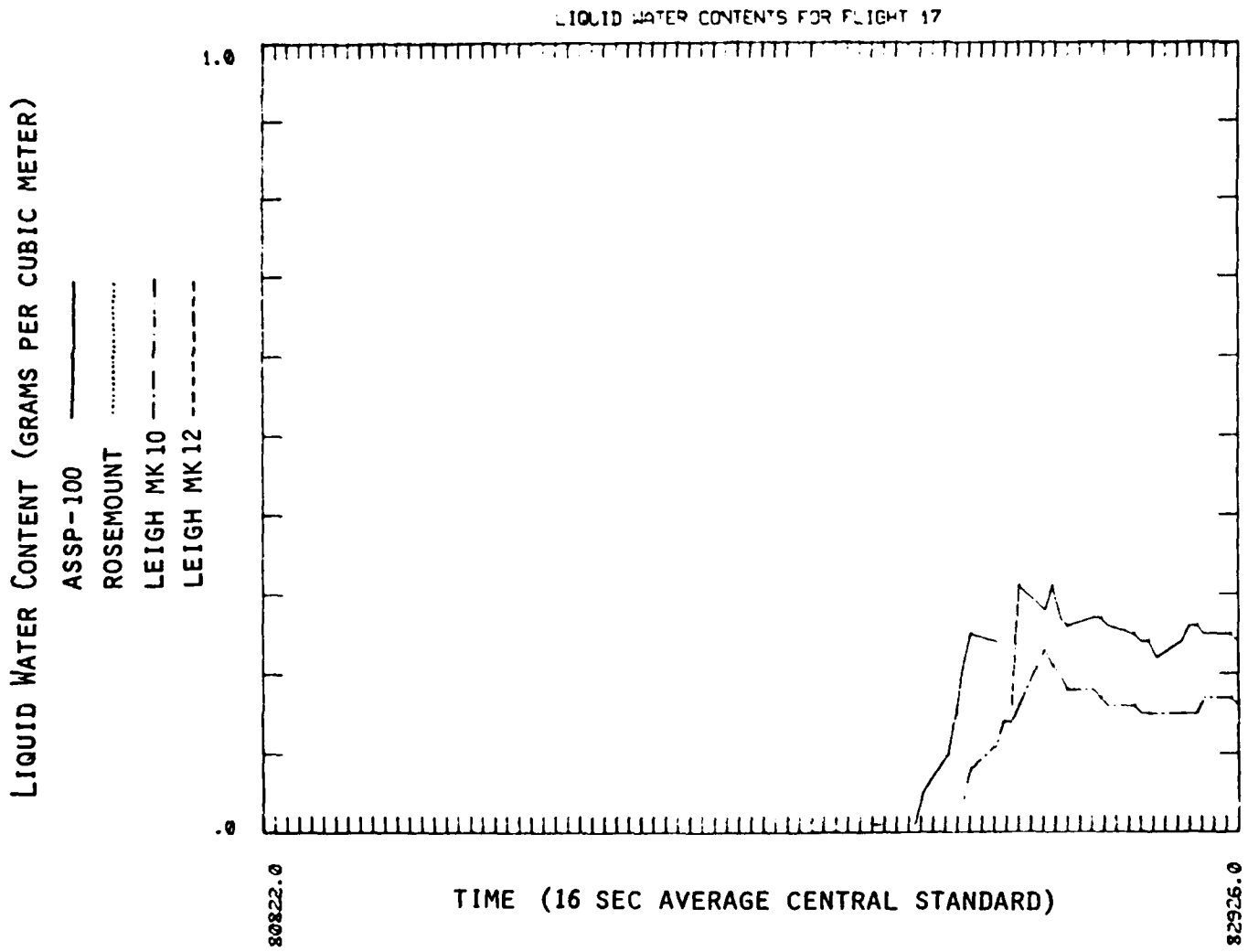
TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
132748	34.7	4183.	6.22	97.1	92.8
1328 4	34.3	4162.	6.22	96.8	89.5
132820	36.6	4123.	6.55	100.4	91.4
132836	37.9	4158.	6.70	101.7	93.5
132852	36.0	4222.	6.55	97.1	91.3
1329 8	37.9	4151.	6.57	102.0	98.9
132924	37.4	4183.	6.58	100.8	90.6
132940	38.4	4169.	6.63	102.4	92.1
132956	38.6	4178.	6.63	102.5	93.4
133012	38.2	4183.	6.63	102.1	95.5
13302B	37.5	4192.	6.62	101.0	92.0
133044	37.1	4236.	6.62	100.5	89.0
1331 0	38.0	4208.	6.62	101.4	91.5
133116	37.4	4229.	6.56	97.1	94.1
133132	37.0	4245.	6.54	98.9	92.9
13314B	36.3	4272.	6.55	98.6	88.7
1332 4	34.5	4265.	6.27	95.8	89.0
133220	34.8	4231.	6.35	96.7	89.1
133236	37.4	4208.	6.67	100.4	90.4
133252	37.2	4229.	6.62	100.2	92.4
1333 8	35.8	4261.	6.42	98.2	92.7
133324	34.0	4282.	6.28	95.4	89.7
133340	33.8	4226.	6.17	95.5	93.0
133356	33.3	4231.	6.20	94.7	88.0
133412	33.6	4220.	6.26	95.0	87.4
13342B	35.7	4165.	6.44	97.1	92.2
133444	35.7	4187.	6.42	99.2	89.2
1335 0	36.9	4203.	6.59	100.4	88.2
133516	36.3	4272.	6.57	99.3	88.3
133532	36.0	4272.	6.47	98.8	92.3
133548	35.3	4217.	6.33	97.9	95.5
1336 4	34.9	4224.	6.34	97.2	87.8
133620	35.3	4210.	6.37	97.9	90.5
133636	35.2	4199.	6.36	97.8	89.4
133652	35.6	4178.	6.40	98.5	88.5
1337 8	36.2	4215.	6.55	99.1	86.7
133724	36.7	4208.	6.52	99.8	91.8
133740	36.6	4183.	6.52	99.7	90.8
133756	36.4	4194.	6.52	99.5	89.9
133812	36.4	4238.	6.55	98.3	88.7
13382B	37.2	4263.	6.60	100.4	91.6
133844	37.2	4282.	6.60	100.4	92.3
1339 0	37.0	4277.	6.55	99.8	95.0
133916	37.3	4236.	6.52	100.3	96.1
133932	37.0	4245.	6.55	99.6	91.8
13394B	37.6	4236.	6.56	100.4	94.2
1340 4	37.5	4190.	6.56	100.9	94.8
134020	37.2	4174.	6.56	100.2	92.6
134036	37.0	4165.	6.56	100.0	92.7
134052	36.7	4165.	6.56	99.6	93.0

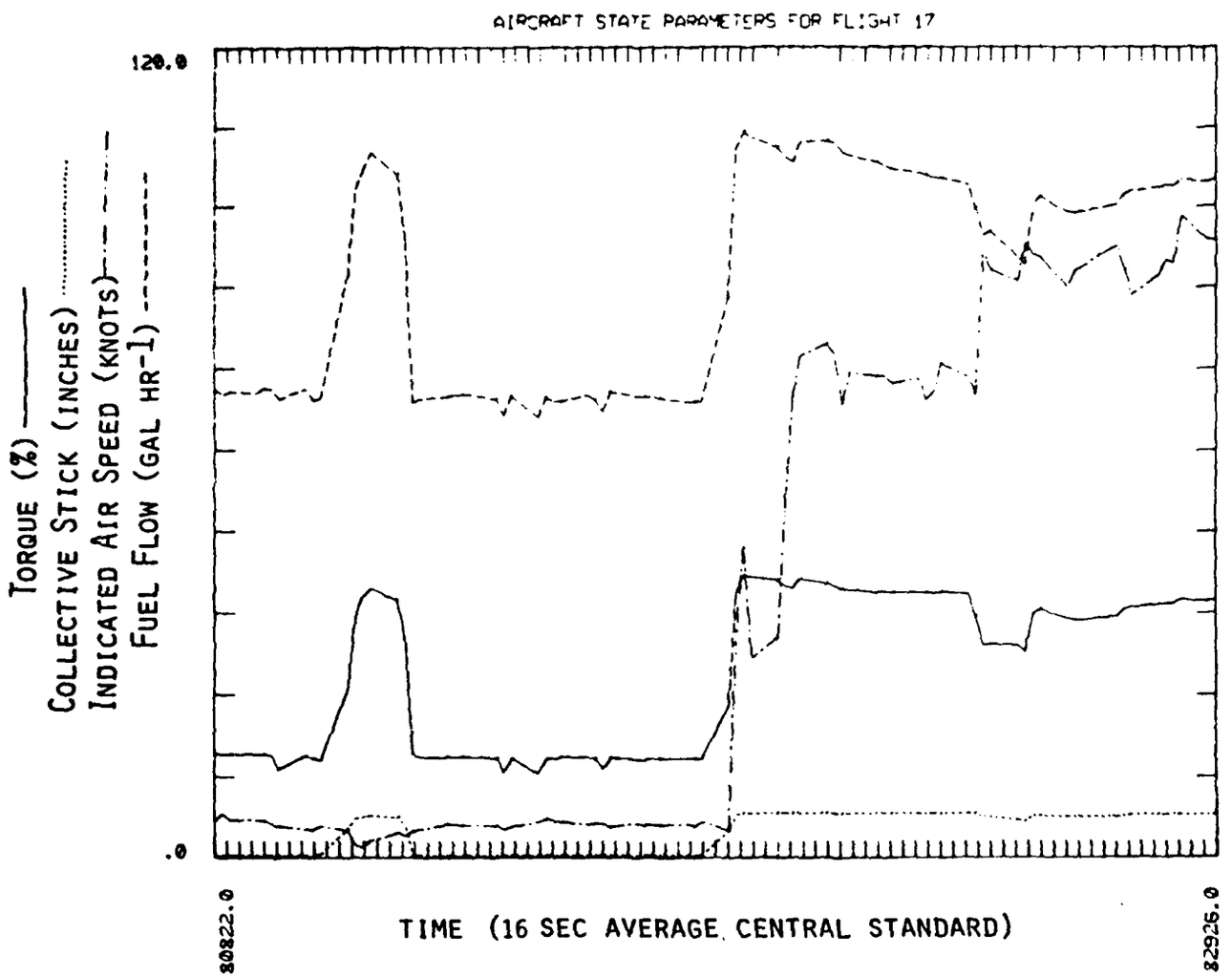
NATURAL ICING ENCOUNTER FLIGHT 16
AIRCRAFT STATE PARAMETERS (JUN-1H 31A)

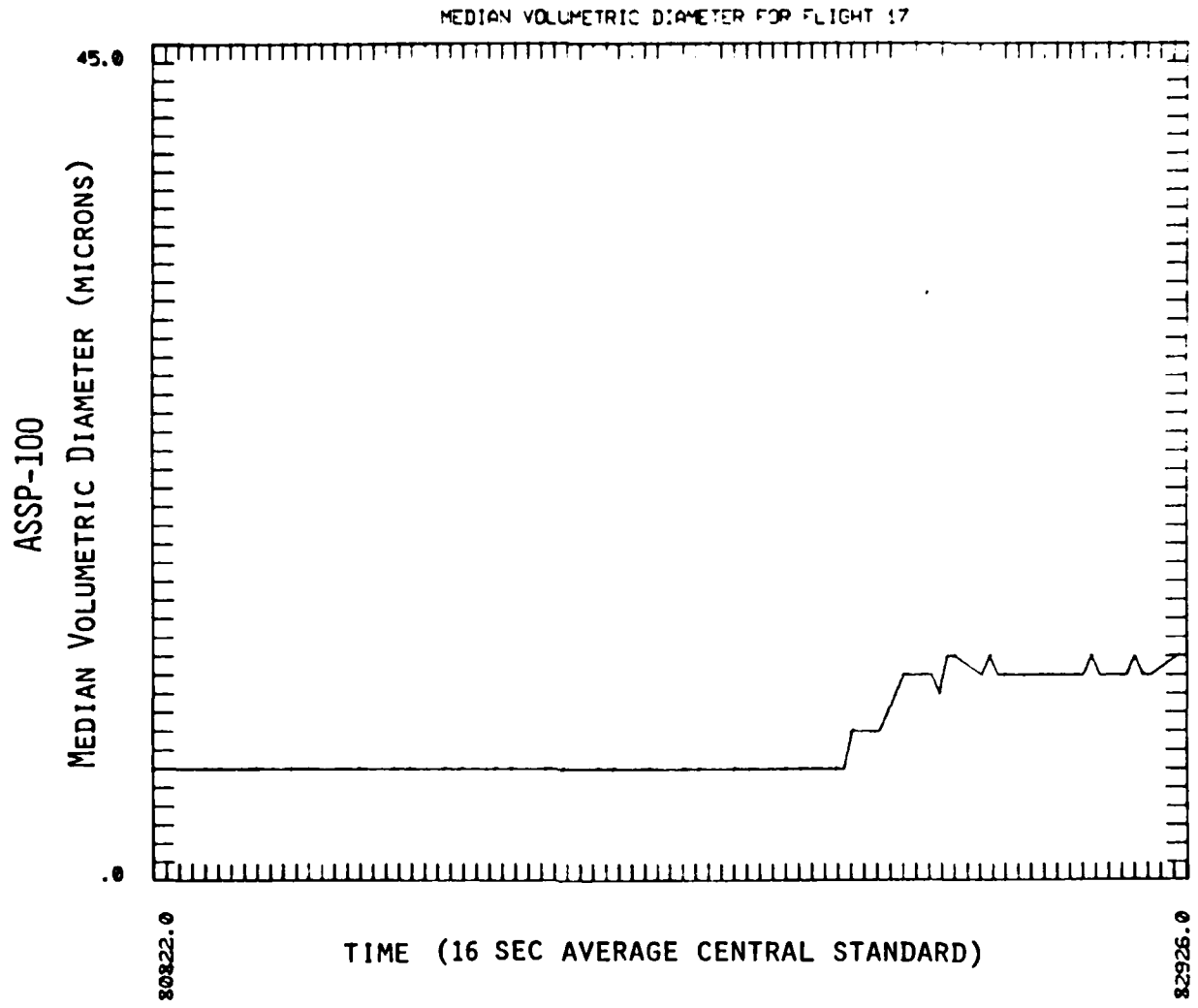
TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
1341 A	37.1	4162.	6.56	98.9	93.5
134124	37.3	4146.	6.56	100.3	93.3
134140	36.9	4151.	6.56	99.A	91.6
134156	36.7	4176.	6.56	99.9	92.6
134212	37.3	4199.	6.56	100.3	94.1
134228	37.2	4220.	6.56	101.0	91.0
134244	38.1	4199.	6.56	101.4	93.A
1343 0	38.1	4203.	6.56	101.5	94.5
134316	38.5	4192.	6.56	102.1	95.2
134332	37.9	4190.	6.56	101.4	92.6
134348	37.4	4169.	6.56	100.9	92.1
1344 4	37.3	4142.	6.56	100.A	92.1
134420	37.0	4110.	6.56	100.5	93.4
134436	37.3	4105.	6.56	100.7	95.2
134452	36.5	4178.	6.56	99.5	AA.3
1345 A	37.6	4190.	6.56	101.2	94.9
134524	38.5	4181.	6.56	101.6	94.0
134540	36.0	4254.	6.56	101.0	87.2
134556	3A.0	4300.	6.56	101.3	87.0
134612	38.1	426A.	6.56	101.5	90.1
134628	37.2	4259.	6.56	97.1	A6.4
134644	36.A	4243.	6.56	94.7	90.A
1347 0	34.2	4245.	6.23	90.3	91.5
134716	31.5	4176.	5.79	91.3	97.7
134732	32.0	4062.	5.77	92.5	99.2
134748	30.2	3993.	5.54	87.9	92.9
1348 4	30.A	3875.	5.4A	90.9	91.A
134820	31.3	3717.	5.4A	92.3	94.2
134836	31.2	3583.	5.47	92.4	93.A
134852	30.9	3469.	5.4A	91.9	92.3
1349 A	30.0	3351.	5.40	90.5	91.6
134924	25.3	3201.	4.59	77.A	95.A
134940	25.2	2995.	4.A0	A2.6	91.1
134956	29.5	2999.	5.56	91.4	76.1
135012	27.5	3021.	5.27	AA.0	75.2
135028	26.6	2981.	5.11	A6.6	78.7
135044	24.7	2955.	4.AA	AA.0	76.9
1351 0	26.0	2931.	5.11	A6.0	72.0
135116	26.0	2916.	5.10	A6.1	74.A
135132	25.A	2936.	5.11	A5.7	6A.2
135148	27.7	2995.	5.41	AA.5	63.9
1352 4	27.6	3047.	5.39	6A.2	67.5
135220	27.6	3080.	5.39	A8.1	69.9
135236	27.7	3069.	5.39	8A.1	73.2
135252	27.7	3084.	5.3A	AA.2	73.A
1353 8	26.6	3089.	5.23	A7.7	73.2
135324	26.2	3062.	5.17	A5.4	76.0
135340	26.2	3045.	5.17	84.2	77.7
135356	26.3	3032.	5.17	A5.0	73.A
135412	26.2	3054.	5.17	A2.3	6A.5

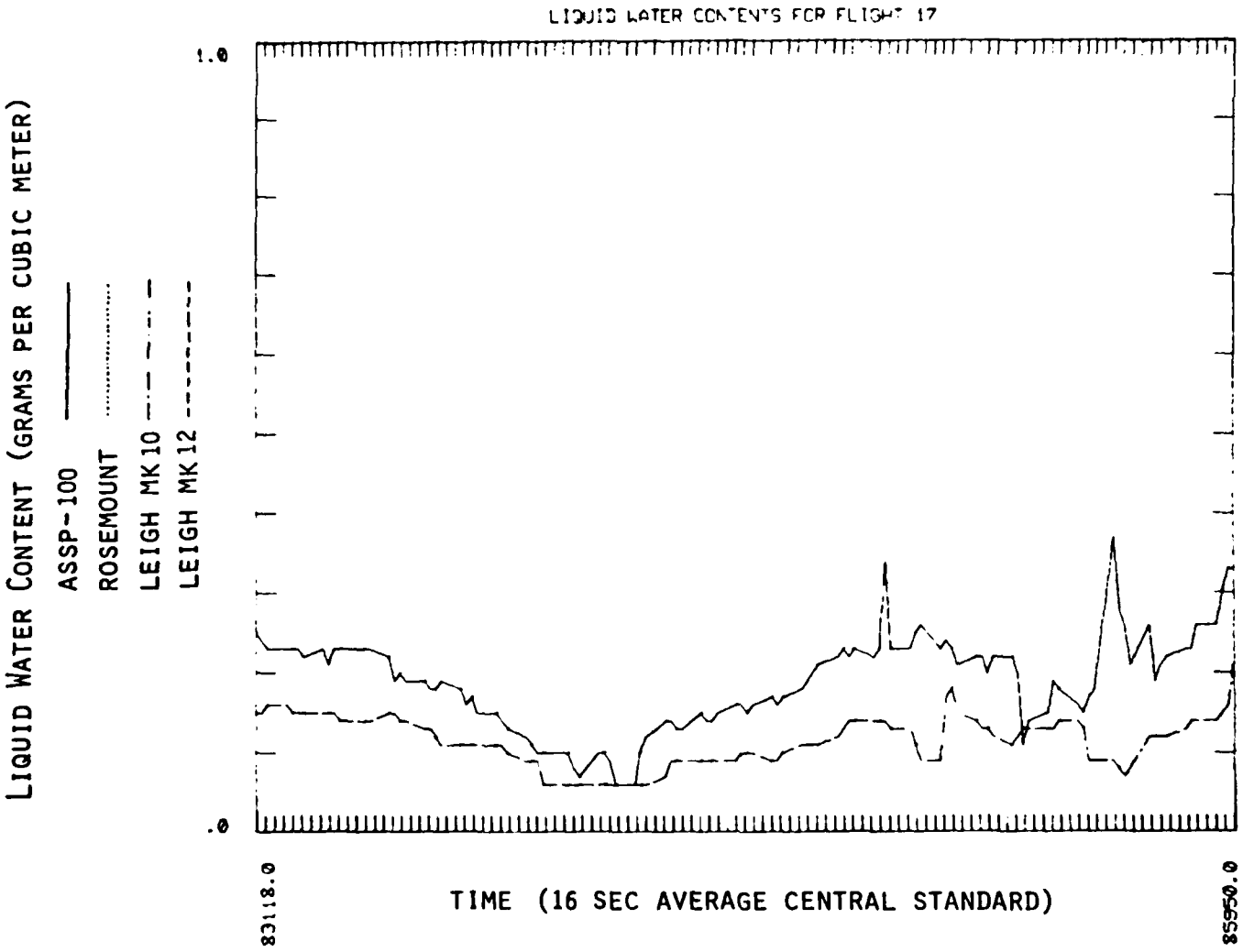
NATURAL ICING ENCOUNTER FLIGHT 16
AIRCRAFT STATE PARAMETERS (JUN-1M 31A)

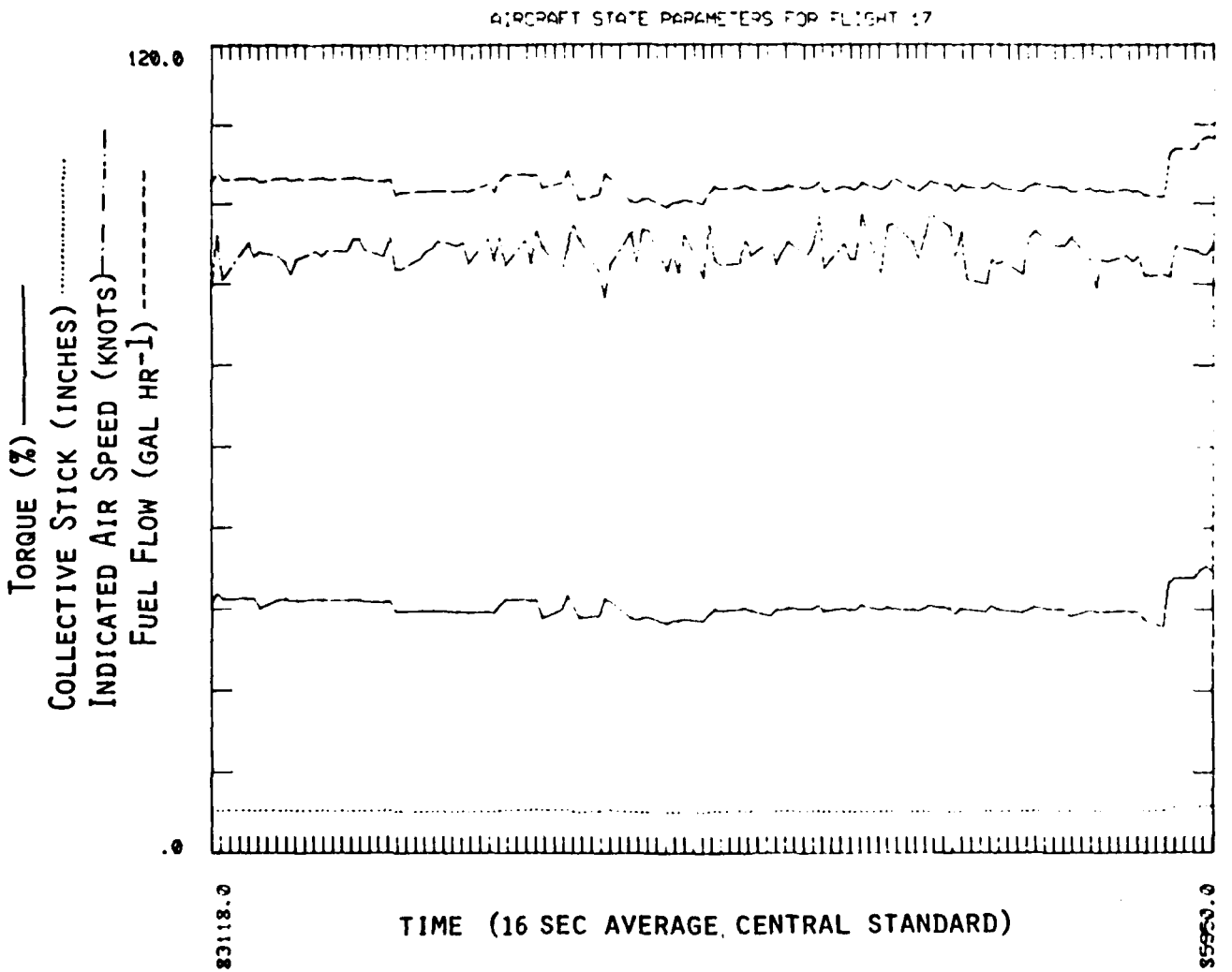
TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
135428	26.0	3082.	5.15	84.6	65.2
135444	30.3	3058.	5.81	92.2	74.4
1355 0	34.1	3043.	6.22	97.1	88.3
135516	34.4	3016.	6.21	97.7	94.3
135532	34.7	2984.	6.21	98.2	96.3
135548	34.6	2979.	6.22	98.3	94.6
1356 4	34.5	2973.	6.22	97.9	93.2
135620	34.3	2995.	6.22	98.2	90.2
135636	34.3	3016.	6.22	98.1	91.1
135652	34.4	3025.	6.22	98.2	92.9
1357 8	34.2	3012.	6.22	98.0	90.5
135724	34.6	2999.	6.22	98.5	96.5

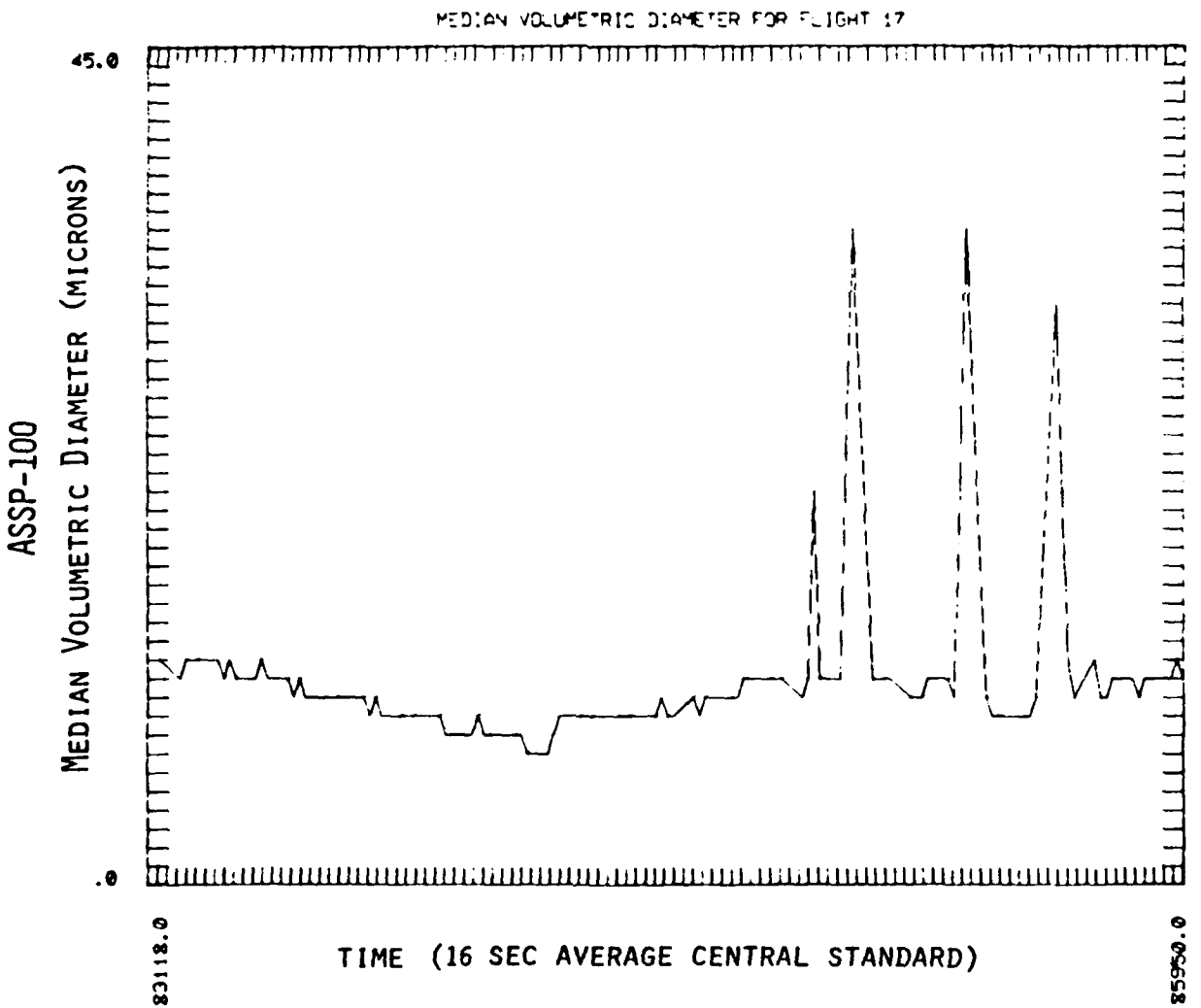

LIQUID WATER CONTENTS FOR FLIGHT 17
LIQUID WATER CONTENT (GRAMS PER CUBIC METER)
ASSP-100
ROSEMOUNT
LEIGH MK10
LEIGH MK12
1.0
.0
80822.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)
82926.0

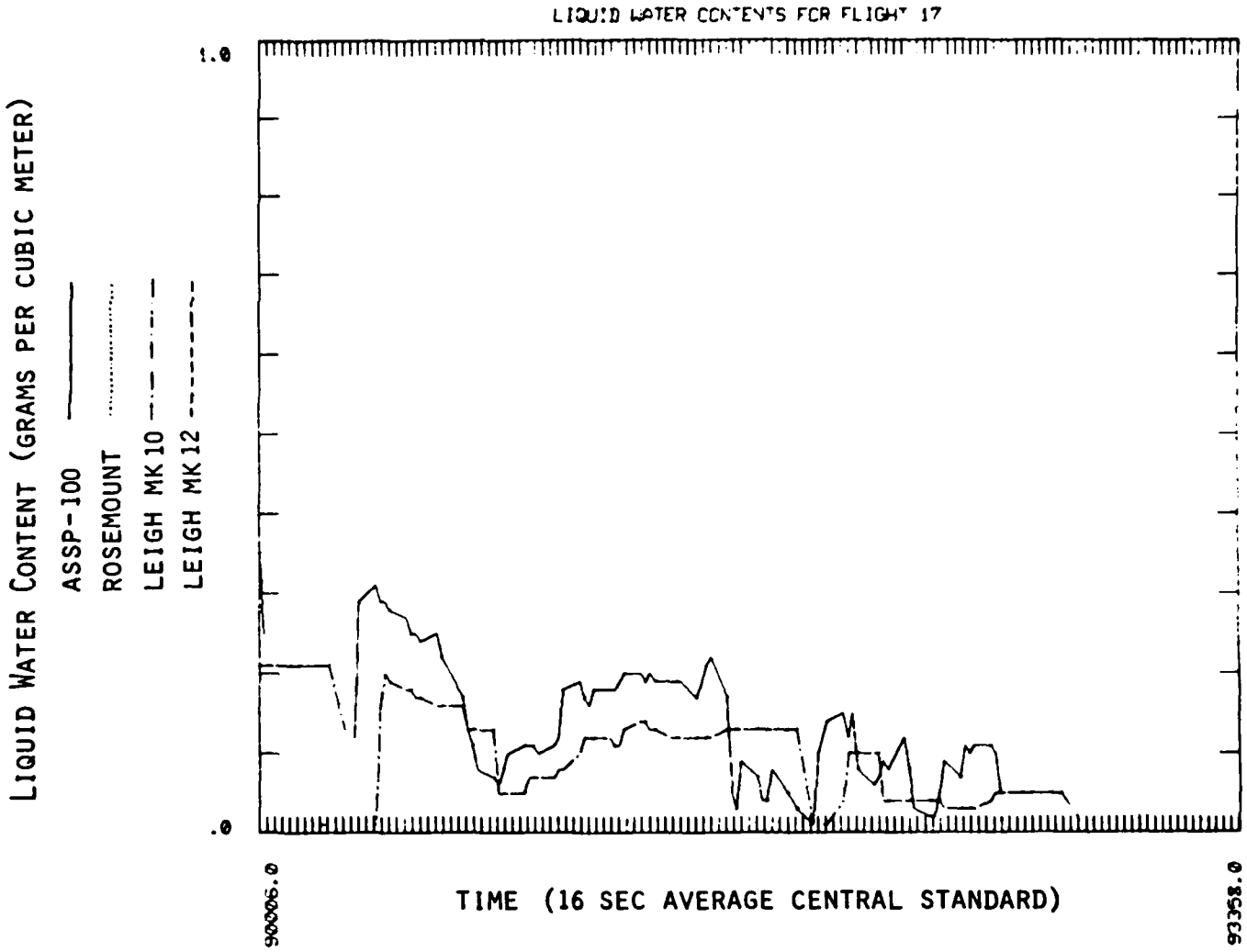

AIRCRAFT STATE PARAMETERS FOR FLIGHT 17
120.0
.0
TORQUE (%)
COLLECTIVE STICK (INCHES)
INDICATED AIR SPEED (KNOTS)
FUEL FLOW (GAL HR-1)
80822.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)
82926.0

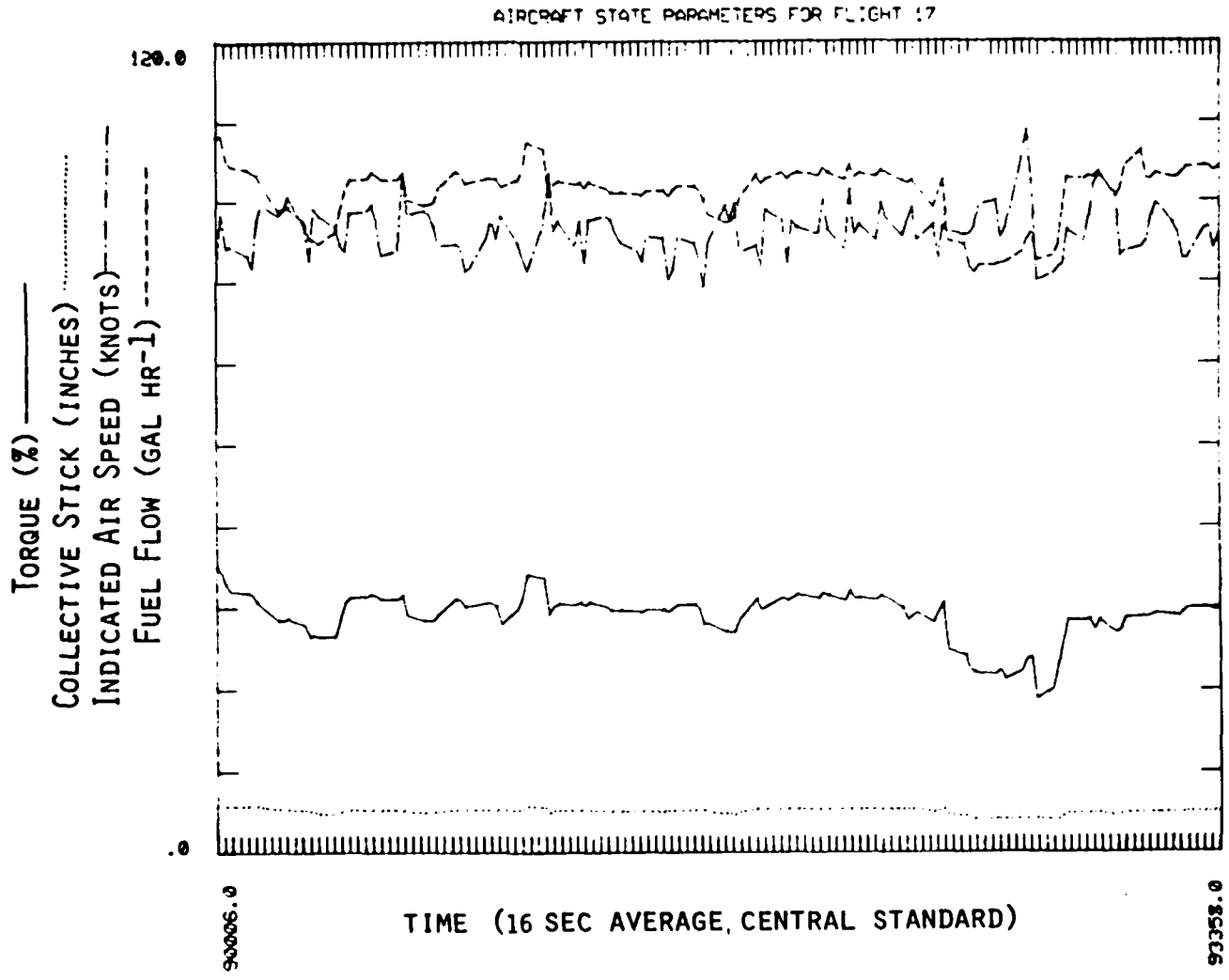

MEDIAN VOLUMETRIC DIAMETER FOR FLIGHT 17
45.0
.0
ASSP-100
MEDIAN VOLUMETRIC DIAMETER (MICRONS)
80822.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)
82926.0

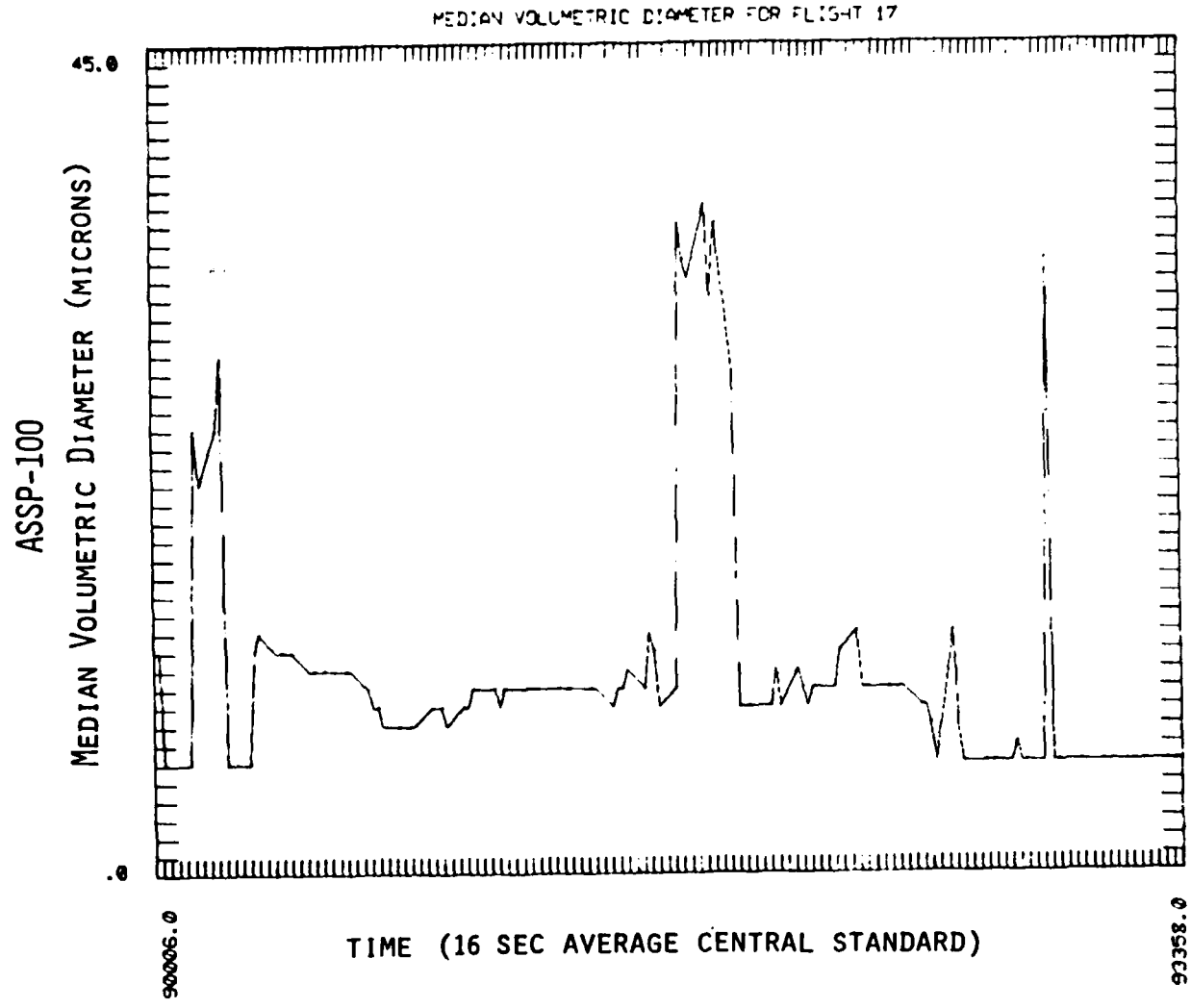

LIQUID WATER CONTENTS FOR FLIGHT 17
LIQUID WATER CONTENT (GRAMS PER CUBIC METER)
ASSP-100
ROSEMOUNT
LEIGH MK 10
LEIGH MK 12
1.0
.0
83118.0
85950.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)


AIRCRAFT STATE PARAMETERS FOR FLIGHT 17
120.0
.0
TORQUE (%)
COLLECTIVE STICK (INCHES)
INDICATED AIR SPEED (KNOTS)
FUEL FLOW (GAL HR-1)
83118.0
TIME (16 SEC AVERAGE, CENTRAL STANDARD)
85950.0


MEDIAN VOLUMETRIC DIAMETER FOR FLIGHT 17
45.0
.0
ASSP-100
MEDIAN VOLUMETRIC DIAMETER (MICRONS)
83118.0
85950.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)


LIQUID WATER CONTENTS FOR FLIGHT 17
LIQUID WATER CONTENT (GRAMS PER CUBIC METER)
ASSP-100
ROSEMOUNT
LEIGH MK10
LEIGH MK12
1.0
.0
900806.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)
933518.0


AIRCRAFT STATE PARAMETERS FOR FLIGHT 17
120.0
.0
TORQUE (%)
COLLECTIVE STICK (INCHES)
INDICATED AIR SPEED (KNOTS)
FUEL FLOW (GAL HR-1)
90006.0
TIME (16 SEC AVERAGE, CENTRAL STANDARD)
93358.0


MEDIAN VOLUMETRIC DIAMETER FOR FLIGHT 17
45.0
.0
ASSP-100
MEDIAN VOLUMETRIC DIAMETER (MICRONS)
90006.0
93358.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)

DATE: 2/23/80 NATURAL ICING ENCOUNTER FLIGHT 17 TAPE RECORD # 1

TIME (LST)	IRU (CNTS)	MK 10 (G/M3)	MK 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
8 822	0.	.00	.05	4.4	0.00	.00	6	19.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 838	0.	.00	.04	19.4	0.00	.00	6	16.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 854	0.	.00	.05	30.6	0.00	.00	6	14.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 910	0.	.00	.05	41.1	0.00	.00	6	12.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 926	0.	.00	.04	50.9	0.00	.00	6	14.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 942	0.	.00	.04	64.6	0.00	.00	6	17.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
8 958	0.	.00	.05	69.7	0.00	.00	6	18.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81014	0.	.00	.04	72.2	0.00	.00	6	16.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81030	0.	.00	.04	72.2	0.00	.00	6	14.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81046	0.	.00	.05	72.2	0.00	.00	6	13.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
811 2	0.	.00	.04	72.2	0.00	.00	6	14.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81118	0.	.00	.04	72.2	0.00	.00	6	9.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81134	0.	.00	.03	72.3	0.00	.00	6	12.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81150	0.	.00	.03	72.2	0.00	.00	6	12.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
812 6	0.	.00	.04	72.2	0.00	.00	6	12.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81222	0.	.00	.04	72.2	0.00	.00	6	12.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81238	0.	.00	.03	72.2	0.00	.00	6	12.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81254	0.	.00	.04	72.2	0.00	.00	6	13.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81310	0.	.00	.04	72.2	0.00	.00	6	12.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81326	0.	.00	.04	72.2	0.00	.00	6	13.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81342	0.	.00	.04	72.2	0.00	.00	6	13.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81358	0.	.00	.03	72.2	0.00	.00	6	16.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81414	0.	.00	.04	72.2	0.00	.00	6	17.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81430	0.	.00	.04	72.2	0.00	.00	6	21.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81446	0.	.00	.02	72.3	0.00	.00	6	22.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
815 2	0.	.00	.02	72.2	0.00	.00	6	22.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81518	0.	.00	.02	72.2	0.00	.00	6	20.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81534	0.	.00	.03	72.2	0.00	.00	6	19.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81550	0.	.00	.02	72.2	0.00	.00	6	19.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
816 6	0.	.00	.02	72.2	0.00	.00	6	17.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81622	0.	.00	.03	72.2	0.00	.00	6	15.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81638	0.	.00	.04	72.2	0.00	.00	6	16.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81654	0.	.00	.03	72.2	0.00	.00	6	15.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81710	0.	.00	.03	72.2	0.00	.00	6	15.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81726	0.	.00	.03	72.2	0.00	.00	6	15.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81742	0.	.00	.04	72.2	0.00	.00	6	14.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81758	0.	.00	.04	72.2	0.00	.00	6	13.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81814	0.	.00	.04	72.2	0.00	.00	6	13.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81830	0.	.00	.04	72.3	0.00	.00	6	13.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81846	0.	.00	.04	72.3	0.00	.00	6	12.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
819 2	0.	.00	.04	72.3	0.00	.00	6	10.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81918	0.	.00	.03	65.5	0.00	.00	6	8.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81934	0.	.00	.03	14.0	0.00	.00	6	6.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
81950	0.	.00	.03	.4	0.00	.00	6	5.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
820 6	0.	.00	.03	-3.3	0.00	.00	6	6.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
82022	0.	.00	.03	-4.4	0.00	.00	6	6.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
82038	0.	.00	.03	-5.3	0.00	.00	6	5.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
82054	0.	.00	.02	-6.4	0.00	.00	6	3.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
82110	0.	.00	.02	-7.2	0.00	.00	6	2.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
82126	0.	.00	.02	-7.3	0.00	.00	6	1.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0

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TIME (LST)	IRU (CNTS)	MK 10 (G/M3)	MK 12 (G/M3)	OAT (C)	ESMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
82142	0.	.00	.02	-6.9	0.00	.01	6	68.	0	76	22	1	0	0	0	0	0	0	0	0	0	0	0
82158	0.	.00	.03	-6.8	0.00	.01	6	77.	0	72	26	1	0	0	0	0	0	0	0	0	0	0	0
82214	0.	.00	.02	-6.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
82230	0.	.00	.03	-6.9	0.00	.01	6	44.	0	80	18	1	0	0	0	0	0	0	0	0	0	0	0
82246	0.	.00	.05	-7.3	0.00	.05	8	253.	0	42	42	11	2	0	0	0	0	0	0	0	0	0	0
823 2	0.	.00	.12	-7.7	0.00	.10	8	350.	0	22	57	16	2	0	0	0	0	0	0	0	0	0	0
82318	0.	.00	.24	-8.0	0.00	.15	9	396.	0	10	47	33	5	0	1	0	0	0	0	0	0	0	0
82334	4.	.04	.26	-8.3	0.00	.21	10	441.	0	6	36	44	7	1	2	0	0	0	0	0	0	0	0
82350	12.	.08	.17	-8.8	0.00	.25	11	460.	0	5	27	50	10	2	3	0	0	0	0	0	0	0	0
824 6	20.	.11	.35	-9.2	0.00	.24	11	392.	0	4	21	52	14	3	3	0	0	0	0	0	0	0	0
82422	31.	.14	0.00	-6.0	0.00	.00	10	2.	0	11	36	42	9	0	0	0	0	0	0	0	0	0	0
82438	31.	.14	.02	-7.5	0.00	.16	12	246.	0	4	18	51	18	4	3	0	0	0	0	0	0	0	0
82454	38.	.16	.29	-9.9	0.00	.31	12	484.	0	4	19	51	16	4	3	0	0	0	0	0	0	0	0
82510	93.	.23	.12	-10.0	0.00	.28	11	448.	0	4	21	51	15	3	3	0	0	0	0	0	0	0	0
82526	106.	.21	.22	-9.9	0.00	.31	12	470.	0	4	19	46	20	5	3	0	0	0	0	0	0	0	0
82542	119.	.20	.28	-9.8	0.00	.27	11	469.	0	4	25	49	13	3	3	0	0	0	0	0	0	0	0
82558	139.	.18	.15	-9.7	0.00	.26	11	455.	0	5	26	47	12	3	3	0	0	0	0	0	0	0	0
82614	143.	.18	.30	-9.7	0.00	.27	11	442.	0	4	22	49	15	4	3	0	0	0	0	0	0	0	0
82630	164.	.17	.14	-9.6	0.00	.27	11	448.	0	4	23	50	13	3	3	0	0	0	0	0	0	0	0
82646	173.	.16	.25	-9.6	0.00	.26	11	445.	0	4	25	49	12	3	3	0	0	0	0	0	0	0	0
827 2	186.	.16	.21	-9.6	0.00	.25	11	419.	0	4	25	45	13	4	3	0	0	0	0	0	0	0	0
82718	199.	.15	.22	-9.5	0.00	.24	11	398.	0	5	24	42	14	4	3	0	0	0	0	0	0	0	0
82734	208.	.15	.22	-9.4	0.00	.24	12	381.	0	4	23	41	15	5	3	1	1	0	0	1	0	0	0
82750	222.	.15	.23	-9.4	0.00	.22	11	385.	0	5	26	43	12	4	3	0	0	0	0	0	0	0	0
828 6	230.	.15	.23	-9.4	0.00	.24	11	403.	0	5	25	43	13	4	3	0	0	0	0	0	0	0	0
82822	246.	.15	.19	-9.5	0.00	.26	12	373.	0	4	18	38	18	7	4	1	1	1	0	1	0	0	0
82838	254.	.15	.32	-9.5	0.00	.26	11	421.	0	4	23	44	13	4	3	0	0	0	0	0	0	0	0
82854	275.	.17	.13	-9.4	0.00	.25	11	405.	0	4	24	42	12	4	3	1	1	1	0	0	0	0	0
82910	280.	.17	.29	-9.4	0.00	.25	12	361.	0	4	20	37	16	6	4	2	1	1	1	0	0	0	0
82926	299.	.16	.17	-9.3	0.00	.24	12	366.	0	4	21	36	14	6	4	2	2	1	1	0	0	1	1
81164	105.	.05	.02	-21.4	0.00	.12	13	138.	0	3	14	31	15	9	6	3	3	2	2	2	1	1	1
81174	108.	.06	0.00	-21.3	0.00	.11	13	132.	0	4	12	31	13	8	7	3	3	2	3	2	1	2	2
16419	486.	3.03	.84	-22.3	0.00	8.09	44	202.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	99
75919	306.	2.16	.45	-24.0	0.00	.95	44	51.	0	0	0	0	0	0	0	0	0	0	0	0	0	4	93

DATE: 2/23/80 NATURAL ICING ENCOUNTER FLIGHT 17 TAPE RECORD # 1

TIME (LST)	IRU (CNTS)	MR 10 (G/M3)	MR 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
83118	381.	.15	.19	-9.2	0.00	.25	12	332.	0	3	17	34	18	8	5	2	1	1	1	0	1	1	0
83138	387.	.15	.28	-9.2	0.00	.24	12	336.	0	4	18	35	19	8	5	2	1	1	0	1	0	0	0
83150	406.	.16	.15	-9.2	0.00	.23	12	353.	0	4	21	38	16	6	4	1	1	0	1	0	0	1	0
832 6	410.	.16	.32	-9.1	0.00	.23	11	395.	0	5	26	41	10	3	3	1	1	0	1	1	0	1	0
83222	424.	.15	.11	-9.2	0.00	.23	12	351.	0	4	20	37	16	6	4	2	1	1	1	0	0	0	0
83238	426.	.15	.31	-9.2	0.00	.23	12	355.	0	4	20	39	16	5	4	1	1	1	1	0	1	0	0
83254	447.	.15	.12	-9.2	0.00	.22	12	360.	0	5	23	39	14	4	4	1	1	1	0	0	0	0	0
83310	452.	.15	.32	-9.2	0.00	.23	12	366.	0	5	23	39	14	5	4	1	1	1	1	1	0	0	0
83326	470.	.15	.11	-9.2	0.00	.21	11	384.	0	5	29	39	11	3	3	1	0	0	0	0	0	0	0
83342	473.	.15	.33	-9.3	0.00	.23	12	356.	0	4	21	41	16	5	3	1	1	0	0	0	0	0	0
83358	494.	.14	.13	-9.2	0.00	.23	11	378.	0	5	25	39	13	5	4	1	1	1	1	0	0	0	0
83414	498.	.14	.32	-9.3	0.00	.23	11	395.	0	5	27	39	13	4	3	1	0	1	1	0	0	0	0
83430	513.	.14	.14	-9.4	0.00	.23	12	379.	0	4	23	40	14	4	3	1	1	0	1	0	0	0	0
83446	520.	.14	.29	-9.4	0.00	.23	11	392.	0	5	25	44	12	3	3	0	0	0	0	0	0	0	0
835 2	537.	.15	.14	-9.4	0.00	.22	11	393.	0	5	27	43	11	3	3	0	0	0	0	0	0	0	0
83518	542.	.15	.34	-9.3	0.00	.19	10	406.	0	7	37	36	8	2	2	0	0	0	0	0	0	0	0
83534	559.	.14	.11	-9.3	0.00	.20	11	401.	0	7	36	35	8	2	3	1	1	0	0	0	0	0	0
83550	559.	.14	.33	-9.4	0.00	.19	10	405.	0	7	37	37	7	2	3	0	0	0	0	0	0	0	0
836 6	582.	.13	.13	-9.5	0.00	.19	10	413.	0	7	39	39	7	1	2	0	0	0	0	0	0	0	0
83622	583.	.13	.26	-9.5	0.00	.18	10	436.	0	8	45	33	7	1	2	0	0	0	0	0	0	0	0
83638	594.	.12	.26	-9.6	0.00	.18	10	420.	0	7	42	36	6	1	2	0	0	0	0	0	0	0	0
83654	602.	.11	.16	-9.6	0.00	.19	10	425.	0	7	39	38	8	2	2	0	0	0	0	0	0	0	0
83710	604.	.11	.37	-9.6	0.00	.18	10	423.	0	8	43	33	7	1	2	0	0	0	0	0	0	0	0
83726	624.	.11	.08	-9.5	0.00	.16	9	419.	0	10	48	31	5	1	1	0	0	0	0	0	0	0	0
83742	624.	.11	.26	-9.5	0.00	.17	10	415.	0	9	44	33	7	1	2	0	0	0	0	0	0	0	0
83758	636.	.11	.28	-9.4	0.00	.15	9	404.	0	12	47	26	6	2	2	0	0	0	0	0	0	0	0
83814	646.	.11	.13	-9.5	0.00	.15	9	418.	0	12	52	25	5	1	1	0	0	0	0	0	0	0	0
83830	646.	.11	.30	-9.5	0.00	.14	9	404.	0	13	51	25	5	1	1	0	0	0	0	0	0	0	0
83846	658.	.10	.27	-9.5	0.00	.13	9	394.	0	14	54	21	4	1	1	0	0	0	0	0	0	0	0
839 2	667.	.09	.11	-9.4	0.00	.12	9	352.	0	15	48	21	5	1	1	0	0	0	0	0	0	1	1
83918	667.	.09	.24	-9.5	0.00	.11	9	380.	0	18	57	16	3	0	0	0	0	0	0	0	0	0	0
83934	667.	.09	.37	-9.4	0.00	.10	8	370.	0	24	57	14	2	0	0	0	0	0	0	0	0	0	0
83950	682.	.06	.25	-9.4	0.00	.10	8	397.	0	25	64	8	0	0	0	0	0	0	0	0	0	0	0
840 6	685.	.06	.09	-9.4	0.00	.10	8	381.	0	25	60	11	1	0	0	0	0	0	0	0	0	0	0
84022	685.	.06	.21	-9.4	0.00	.10	9	360.	0	22	53	15	2	0	0	0	0	0	0	0	0	1	0
84038	685.	.06	.32	-9.4	0.00	.08	8	361.	0	32	53	10	1	0	0	0	0	0	0	0	0	0	0
84054	688.	.06	.42	-9.6	0.00	.07	8	337.	0	36	52	9	1	0	0	0	0	0	0	0	0	0	0
84110	695.	.06	.05	-9.5	0.00	.10	8	380.	0	23	60	13	1	0	0	0	0	0	0	0	0	0	0
84126	697.	.06	.17	-9.6	0.00	.10	8	394.	0	22	61	13	1	0	0	0	0	0	0	0	0	0	0
84142	697.	.06	.28	-9.6	0.00	.09	8	364.	0	29	56	12	1	0	0	0	0	0	0	0	0	0	0
84158	699.	.06	.40	-9.4	0.00	.06	7	342.	0	45	46	6	0	0	0	0	0	0	0	0	0	0	0
84214	718.	.06	.23	-9.3	0.00	.06	7	335.	0	43	50	5	0	0	0	0	0	0	0	0	0	0	0
84230	718.	.06	.09	-9.3	0.00	.10	8	389.	0	23	66	8	0	0	0	0	0	0	0	0	0	0	0
84246	718.	.06	.22	-9.4	0.00	.12	9	423.	0	17	62	16	2	0	0	0	0	0	0	0	0	0	0
843 2	724.	.07	.37	-9.4	0.00	.14	9	444.	0	15	58	21	3	0	0	0	0	0	0	0	0	0	0
84318	745.	.09	.07	-9.3	0.00	.14	9	425.	0	14	59	21	2	0	0	0	0	0	0	0	0	0	0
84334	745.	.09	.23	-9.1	0.00	.13	9	437.	0	17	60	17	2	0	0	0	0	0	0	0	0	0	0
84350	748.	.09	.38	-9.0	0.00	.13	9	434.	0	16	58	20	3	0	0	0	0	0	0	0	0	0	0
844 6	758.	.09	.07	-8.9	0.00	.15	9	393.	0	11	47	30	6	1	1	0	0	0	0	0	0	0	0
84422	758.	.09	.23	-8.7	0.00	.14	9	422.	0	15	56	21	4	0	1	0	0	0	0	0	0	0	0

DATE: 2/23/80 NATURAL ICING ENCOUNTER FLIGHT 17 TAPE RECORD # 51

TIME (LST)	IPD (CNTS)	MR 10 (G/M3)	MR 12 (G/M3)	DAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MD)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
84438	764.	.09	.35	-8.5	0.00	.14	9	425.	0	13	55	22	4	0	1	0	0	0	0	0	0	0	0
84454	777.	.09	.09	-8.3	0.00	.15	9	436.	0	13	54	24	4	1	1	0	0	0	0	0	0	0	0
84510	777.	.09	.27	-8.2	0.00	.16	9	412.	0	10	49	28	6	1	1	0	0	0	0	0	0	0	0
84526	789.	.10	.25	-8.1	0.00	.16	10	402.	0	10	43	29	8	2	2	0	0	0	0	0	0	0	0
84542	798.	.10	.13	-8.0	0.00	.15	9	396.	0	11	47	29	6	1	1	0	0	0	0	0	0	0	0
84558	798.	.10	.31	-7.9	0.00	.16	9	422.	0	11	49	29	5	1	1	0	0	0	0	0	0	0	0
84614	811.	.09	.20	-7.8	0.00	.17	10	410.	0	9	45	32	6	1	2	0	0	0	0	0	0	0	0
84630	816.	.09	.18	-7.8	0.00	.16	9	428.	0	10	49	30	5	1	1	0	0	0	0	0	0	0	0
846	819.	.10	.37	-7.7	0.00	.17	10	400.	0	8	42	35	7	2	2	0	0	0	0	0	0	0	0
7 2	835.	.11	.08	-7.7	0.00	.18	10	406.	0	8	40	34	8	2	2	0	0	0	0	0	0	0	0
84718	836.	.11	.29	-7.6	0.00	.19	10	411.	0	7	38	38	8	2	2	0	0	0	0	0	0	0	0
84734	850.	.11	.18	-7.5	0.00	.20	10	439.	0	7	41	38	6	1	2	0	0	0	0	0	0	0	0
84750	855.	.11	.24	-7.5	0.00	.21	11	432.	0	6	36	39	7	2	2	0	0	0	0	0	0	0	0
848 6	865.	.12	.24	-7.6	0.00	.22	11	435.	0	6	34	42	7	1	3	0	0	0	0	0	0	0	0
84822	873.	.13	.21	-7.6	0.00	.23	11	437.	0	5	31	42	9	2	3	0	0	0	0	0	0	0	0
8483A	883.	.14	.25	-7.6	0.00	.22	11	437.	0	6	34	40	8	2	3	0	0	0	0	0	0	0	0
84854	892.	.14	.19	-7.7	0.00	.23	11	411.	0	5	28	42	12	3	3	0	0	0	0	0	0	0	0
84910	899.	.14	.28	-7.6	0.00	.22	10	443.	0	6	36	38	8	2	3	0	0	0	0	0	0	0	0
84926	909.	.14	.16	-7.5	0.00	.23	11	409.	0	5	28	41	12	4	4	0	0	0	0	0	0	0	0
84942	913.	.14	.38	-7.4	0.00	.34	21	344.	0	3	17	18	4	2	4	3	4	5	6	6	7	7	7
8495A	926.	.13	.11	-7.3	0.00	.23	11	458.	0	6	34	40	9	2	3	0	0	0	0	0	0	0	0
85014	926.	.13	.31	-7.4	0.00	.23	11	444.	0	6	32	43	9	2	3	0	0	0	0	0	0	0	0
85030	932.	.11	.21	-7.2	0.00	.25	23	291.	0	4	18	15	4	2	3	3	4	4	6	6	6	8	11
85046	939.	.09	.08	-7.2	0.00	.26	35	119.	0	2	6	5	1	2	3	4	6	6	9	9	10	14	17
851 2	939.	.09	.21	-7.2	0.00	.23	11	390.	0	5	27	34	8	2	3	1	1	1	2	2	2	2	2
85118	956.	.17	.17	-7.2	0.00	.24	11	452.	0	5	30	44	10	2	3	0	0	0	0	0	0	0	0
85134	960.	.18	.26	-7.1	0.00	.23	11	457.	0	6	34	40	9	2	3	0	0	0	0	0	0	0	0
85150	969.	.15	.18	-7.1	0.00	.21	11	428.	0	6	33	37	11	4	3	0	0	0	0	0	0	0	0
852 6	971.	.14	.23	-7.1	0.00	.22	10	460.	0	7	37	37	10	2	3	0	0	0	0	0	0	0	0
85222	977.	.13	.22	-7.0	0.00	.22	10	480.	0	7	41	35	8	1	3	0	0	0	0	0	0	0	0
85238	982.	.13	.19	-6.9	0.00	.20	10	464.	0	8	41	33	9	2	2	0	0	0	0	0	0	0	0
85254	984.	.12	.29	-6.7	0.00	.22	11	418.	0	6	31	36	13	4	3	0	0	0	0	0	0	0	0
85310	659.	.11	.14	-6.7	0.00	.22	11	432.	0	6	33	37	13	4	3	0	0	0	0	0	0	0	0
85326	2.	.12	.35	-6.7	0.00	.20	10	457.	0	8	40	35	9	2	2	0	0	0	0	0	0	0	0
85342	21.	.13	.03	-6.7	0.00	.11	19	185.	0	9	24	11	2	1	2	2	3	5	6	5	5	8	9
85358	21.	.13	.03	-6.5	0.00	.14	35	22.	0	0	1	1	1	3	4	5	7	8	10	10	11	14	17
85414	21.	.13	.08	-6.6	0.00	.15	10	322.	0	8	38	25	6	2	3	1	1	1	1	2	2	2	3
85430	21.	.13	.30	-6.7	0.00	.19	9	482.	0	10	47	29	7	1	2	0	0	0	0	0	0	0	0
85446	33.	.14	.14	-6.7	0.00	.18	9	472.	0	11	49	27	6	1	1	0	0	0	0	0	0	0	0
855 2	35.	.14	.22	-6.6	0.00	.16	9	458.	0	12	48	28	6	1	1	0	0	0	0	0	0	0	0
85518	38.	.13	.39	-6.4	0.00	.15	9	454.	0	14	48	21	5	1	1	0	0	0	0	1	0	0	1
85534	55.	.09	.09	-6.3	0.00	.17	9	478.	0	12	52	24	5	1	1	0	0	0	0	0	0	0	0
85550	55.	.09	.25	-6.3	0.00	.18	10	420.	0	11	42	16	4	1	2	2	2	2	3	3	2	3	3
856 6	55.	.09	.34	-6.0	0.00	.37	51	220.	0	2	9	4	2	3	4	6	7	8	9	9	10	10	11
85622	68.	.08	.21	-5.8	0.00	.28	21	381.	0	4	21	10	4	2	3	3	4	4	6	6	6	6	8
85638	73.	.07	.14	-6.0	0.00	.26	12	388.	0	5	27	20	5	2	3	2	3	3	4	4	5	5	6
85654	75.	.08	.35	-5.9	0.00	.21	10	438.	0	7	38	32	7	2	2	0	0	0	0	1	0	1	1
85710	99.	.12	.10	-5.8	0.00	.26	12	419.	0	5	28	27	6	2	3	2	2	3	3	3	3	3	4
85726	99.	.12	.27	-5.6	0.00	.19	10	464.	0	9	47	30	6	1	2	0	0	0	0	0	0	0	0
85742	115.	.12	.21	-5.5	0.00	.21	10	443.	0	7	37	38	8	2	3	0	0	0	0	0	0	0	0

DATE: 2/23/80 NATURAL ICING ENCOUNTER FLIGHT 17 TAPE RECORD # 101

TIME (LST)	IRU (CNTS)	MK 10 (G/M3)	MK 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASF (G/M3)	MVD (MU)	LWM (G/CM3)	% MASS DISTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
85758	122.	.12	.22	-5.5	0.00	.22	11	488.	0	6	35	41	8	2	3	0	0	0	0	0	0	0	0
85914	133.	.13	.24	-5.6	0.00	.23	11	480.	0	6	32	42	10	3	3	0	0	0	0	0	0	0	0
85830	145.	.14	.18	-5.5	0.00	.23	10	475.	0	6	37	41	4	1	3	0	0	0	0	0	0	0	0
85946	155.	.14	.27	-5.7	0.00	.26	11	467.	0	5	29	45	12	3	3	0	0	0	0	0	0	0	0
8592	168.	.14	.18	-5.8	0.00	.24	11	461.	0	5	29	45	11	2	3	0	0	0	0	0	0	0	0
85918	182.	.15	.22	-6.0	0.00	.30	11	499.	0	4	25	47	14	3	4	0	0	0	0	0	0	0	0
85934	194.	.16	.25	-5.9	0.00	.33	12	506.	0	3	20	49	16	4	3	0	0	0	0	0	0	0	0
85950	216.	.21	.14	-6.0	0.00	.33	11	522.	0	4	21	48	12	3	3	0	0	0	0	0	0	0	0
9 0 6	228.	.21	.23	-6.0	0.00	.35	12	500.	0	3	16	49	21	5	3	0	0	0	0	0	0	0	0
9 022	245.	.21	.21	-5.9	0.00	.25	12	329.	0	3	13	42	30	7	3	0	0	0	0	0	0	0	0
9 038	246.	.21	.29	-2.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
9 054	246.	.21	.27	-.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
9 110	246.	.21	.24	.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
9 126	246.	.21	.22	.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
9 142	245.	.21	.20	-.4	0.00	.00	24	0.	0	1	3	4	5	9	15	11	16	0	30	0	0	0	0
9 158	245.	.21	.18	.0	0.00	.00	21	2.	0	4	7	9	10	9	14	7	10	0	0	25	0	0	0
9 214	246.	.21	.16	-.2	0.00	.01	24	4.	0	3	7	7	8	7	7	11	10	7	9	0	0	19	0
9 230	246.	.21	.14	-.1	0.00	.01	28	3.	0	2	4	5	6	7	7	7	10	6	9	0	15	18	0
9 246	246.	.21	.12	-.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
9 3 2	246.	.13	.10	-.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
9 318	246.	.00	.08	.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
9 334	246.	.00	.09	-2.6	0.00	.12	12	158.	0	3	14	46	27	5	3	0	0	0	0	0	0	0	0
9 350	246.	.00	.26	-6.7	0.00	.29	13	362.	0	3	12	38	32	8	3	0	0	0	0	0	0	0	0
9 4 6	248.	.01	.17	-7.2	0.00	.31	12	432.	0	3	15	47	23	5	3	0	0	0	0	0	0	0	0
9 422	262.	.16	.18	-7.3	0.00	.29	12	432.	0	3	17	49	20	4	3	0	0	0	0	0	0	0	0
9 438	272.	.20	.19	-7.1	0.00	.29	12	425.	0	3	17	48	21	5	3	0	0	0	0	0	0	0	0
9 454	293.	.19	.[illegible]	-7.5	0.00	.28	12	422.	0	3	19	48	17	5	3	0	0	0	0	0	0	0	0
9 510	304.	.18	.[illegible]	-7.5	0.00	.27	11	433.	0	4	22	49	14	4	3	0	0	0	0	0	0	0	0
9 526	315.	.18	.[illegible]	-7.5	0.00	.25	11	412.	0	4	22	47	15	4	3	0	0	0	0	0	0	0	0
9 542	334.	.17	.15	.5	0.00	.25	11	431.	0	4	26	48	13	3	3	0	0	0	0	0	0	0	0
9 558	339.	.17	.32	4	0.00	.24	11	423.	0	4	26	49	12	3	3	0	0	0	0	0	0	0	0
9 614	361.	.16	.[illegible]	.4	0.00	.25	11	423.	0	4	24	49	13	3	3	0	0	0	0	0	0	0	0
9 630	365.	.16	.[illegible]	-7.3	0.00	.22	11	438.	0	5	32	45	10	2	3	0	0	0	0	0	0	0	0
9 646	384.	.16	.12	-7.2	0.00	.21	11	429.	0	6	35	44	8	1	2	0	0	0	0	0	0	0	0
9 7 2	385.	.16	.35	-6.9	0.00	.17	10	415.	0	8	44	36	6	1	2	0	0	0	0	0	0	0	0
9 718	406.	.13	.11	-6.7	0.00	.13	9	390.	0	13	54	25	4	1	1	0	0	0	0	0	0	0	0
9 734	406.	.13	.18	-6.5	0.00	.11	9	350.	0	18	54	20	4	1	1	0	0	0	0	0	0	0	0
9 750	406.	.13	.30	-6.3	0.00	.08	8	313.	0	28	56	12	1	0	0	0	0	0	0	0	0	0	0
9 8 6	406.	.13	.39	-6.2	0.00	.07	8	286.	0	32	52	12	1	0	0	0	0	0	0	0	0	0	0
9 822	423.	.05	.25	-6.2	0.00	.06	8	290.	0	33	52	11	2	0	0	0	0	0	0	0	0	0	0
9 838	424.	.05	.07	-6.2	0.00	.08	8	341.	0	27	61	9	1	0	0	0	0	0	0	0	0	0	0
9 854	424.	.05	.18	-6.2	0.00	.10	8	343.	0	19	62	14	2	0	0	0	0	0	0	0	0	0	0
9 910	424.	.05	.32	-6.2	0.00	.11	9	360.	0	17	55	20	4	1	1	0	0	0	0	0	0	0	0
9 926	439.	.07	.25	-6.3	0.00	.11	9	374.	0	18	58	17	5	0	0	0	0	0	0	0	0	0	0
9 942	447.	.07	.11	-6.4	0.00	.11	9	378.	0	19	59	16	2	0	0	0	0	0	0	0	0	0	0
9 958	446.	.07	.25	-6.4	0.00	.10	8	379.	0	21	58	15	5	0	0	0	0	0	0	0	0	0	0
91014	449.	.07	.38	-6.4	0.00	.11	9	374.	0	19	58	17	5	0	0	0	0	0	0	0	0	0	0
91030	470.	.08	.08	-6.4	0.00	.12	9	382.	0	16	57	19	5	0	0	0	0	0	0	0	0	0	0
91046	470.	.08	.21	-6.6	0.00	.18	10	391.	0	7	37	38	10	2	2	0	0	0	0	0	0	0	0
911 2	480.	.10	.25	-6.9	0.00	.19	10	423.	0	7	38	38	9	2	2	0	0	0	0	0	0	0	0

DATE: 2/23/80 NATURAL ICING ENCOUNTER FLIGHT 17 TAPE RECORD # 151

TIME (LST)	IWD (CNTS)	MK 10 (G/M3)	MK 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
91118	495.	.12	.15	-7.0	0.00	.17	10	433.	0	10	46	31	7	1	2	0	0	0	0	0	0	0	0
91134	497.	.12	.36	-6.9	0.00	.16	9	426.	0	10	49	30	5	1	1	0	0	0	0	0	0	0	0
91150	517.	.12	.10	-6.9	0.00	.18	10	429.	0	8	46	34	6	1	2	0	0	0	0	0	0	0	0
912 6	517.	.12	.26	-6.8	0.00	.18	10	427.	0	7	44	37	6	1	2	0	0	0	0	0	0	0	0
91222	530.	.11	.22	-6.8	0.00	.18	10	430.	0	8	45	35	6	1	2	0	0	0	0	0	0	0	0
91238	539.	.11	.17	-6.9	0.00	.19	10	435.	0	7	44	38	6	0	2	0	0	0	0	0	0	0	0
91254	549.	.13	.30	-6.9	0.00	.20	10	437.	0	7	39	41	7	1	2	0	0	0	0	0	0	0	0
91310	565.	.14	.13	-7.1	0.00	.20	10	435.	0	7	38	40	8	1	2	0	0	0	0	0	0	0	0
91326	567.	.14	.34	-7.0	0.00	.19	10	434.	0	7	41	38	8	1	2	0	0	0	0	0	0	0	0
91342	586.	.13	.09	-6.9	0.00	.20	10	420.	0	7	38	41	8	1	2	0	0	0	0	0	0	0	0
91358	587.	.13	.31	-6.8	0.00	.19	10	426.	0	7	43	37	7	1	2	0	0	0	0	0	0	0	0
91414	605.	.12	.14	-8.0	0.00	.19	10	406.	0	7	37	40	8	2	2	0	0	0	0	0	0	0	0
91430	608.	.12	.22	-8.5	0.00	.19	10	414.	0	7	40	39	8	1	2	0	0	0	0	0	0	0	0
91446	619.	.12	.25	-8.6	0.00	.19	10	408.	0	8	46	33	7	1	2	0	0	0	0	0	0	0	0
915 2	632.	.12	.14	-8.7	0.00	.17	9	440.	0	9	49	30	6	1	2	0	0	0	0	0	0	0	0
91518	633.	.12	.35	-8.7	0.00	.19	10	425.	0	7	42	37	7	1	2	0	0	0	0	0	0	0	0
91534	653.	.12	.10	-8.7	0.00	.21	10	444.	0	6	38	41	8	1	2	0	0	0	0	0	0	0	0
91550	653.	.12	.29	-8.7	0.00	.22	11	440.	0	6	35	43	9	2	3	0	0	0	0	0	0	0	0
916 6	672.	.13	.12	-8.7	0.00	.17	10	391.	0	7	40	38	8	1	2	0	0	0	0	0	0	0	0
91622	679.	.13	0.00	-8.6	0.00	.05	13	75.	0	7	26	15	4	2	2	2	2	4	5	5	6	7	6
91638	678.	.13	0.00	-8.6	0.00	.03	12	67.	0	10	29	13	2	2	3	2	3	3	5	4	5	7	4
91654	679.	.13	.08	-8.5	0.00	.09	9	242.	0	15	43	14	2	1	1	1	1	2	2	1	3	4	5
91710	679.	.13	.23	-8.4	0.00	.07	10	163.	0	13	38	23	4	1	2	1	1	1	1	1	1	1	4
91726	679.	.13	.24	-8.3	0.00	.04	35	15.	0	3	2	1	1	2	4	5	7	7	9	10	10	13	20
91742	679.	.13	.31	-8.1	0.00	.04	33	44.	0	7	9	2	2	2	3	4	6	6	8	10	11	11	13
91758	679.	.13	.30	-8.0	0.00	.08	32	70.	0	5	7	3	2	3	4	5	7	7	9	8	10	12	11
91814	679.	.13	.25	-8.0	0.00	.05	36	5.	0	0	0	1	1	2	3	4	6	7	11	11	12	15	19
91830	678.	.13	.25	-8.2	0.00	.04	31	57.	0	8	18	4	2	2	2	3	5	4	7	7	9	11	14
91846	678.	.13	.29	-8.3	0.00	.03	35	22.	0	6	1	1	1	2	4	5	5	8	9	10	9	16	15
919 2	679.	.01	.34	-8.3	0.00	.01	27	31.	0	22	5	1	2	3	4	5	7	6	8	5	7	8	11
91918	679.	.00	.37	-8.4	0.00	.10	9	298.	0	13	53	22	4	1	1	0	0	0	0	0	0	0	0
91934	685.	.01	.05	-8.4	0.00	.12	9	425.	0	18	62	16	2	0	0	0	0	0	0	0	0	0	0
91950	685.	.01	.21	-8.6	0.00	.14	9	419.	0	14	53	24	5	1	1	0	0	0	0	0	0	0	0
920 6	689.	.04	.39	-8.6	0.00	.15	9	424.	0	12	51	25	6	1	1	0	0	0	0	0	0	0	0
92022	708.	.10	.03	-8.7	0.00	.12	9	323.	0	12	51	26	5	1	1	0	0	0	0	0	0	0	0
92038	708.	.10	.14	-8.6	0.00	.15	11	295.	0	9	33	15	4	2	2	2	2	3	3	4	4	4	6
92054	708.	.10	.29	-8.7	0.00	.08	9	215.	0	13	53	21	4	0	1	0	0	0	0	0	0	1	2
92110	708.	.10	.35	-8.7	0.00	.06	11	131.	0	10	32	21	7	2	2	1	2	2	2	2	3	3	4
92126	708.	.10	.38	-8.6	0.00	.07	10	164.	0	12	39	16	4	1	2	1	1	1	2	3	2	3	4
92142	723.	.04	.19	-8.7	0.00	.09	9	240.	0	11	51	28	5	1	1	0	0	0	0	0	0	0	0
92158	723.	.04	.02	-8.6	0.00	.08	10	195.	0	10	46	31	6	1	2	0	0	0	0	0	0	0	0
92214	723.	.04	.16	-8.7	0.00	.12	10	293.	0	9	43	29	6	1	2	0	0	0	0	0	0	1	1
92230	723.	.04	.27	-8.9	0.00	.08	10	186.	0	9	41	22	4	1	2	1	1	1	2	2	2	3	3
92246	723.	.04	.31	-8.8	0.00	.03	12	64.	0	13	29	13	2	2	2	1	3	3	4	5	3	4	10
923 2	723.	.04	.34	-8.7	0.00	.02	13	31.	0	12	24	13	2	1	3	2	2	2	3	5	6	8	9
92318	722.	.04	.35	-8.6	0.00	.02	10	58.	0	11	44	23	3	1	2	1	1	0	2	0	0	0	6
92334	730.	.04	.39	-8.6	0.00	.05	10	117.	0	8	36	31	6	1	2	0	0	0	1	1	1	2	2
92350	742.	.03	.32	-8.7	0.00	.09	10	201.	0	8	39	41	7	1	2	0	0	0	0	0	0	0	0
924 6	743.	.03	.02	-8.7	0.00	.07	10	166.	0	11	40	29	6	1	2	0	0	0	0	1	0	1	2
92422	743.	.03	.13	-8.7	0.00	.11	10	253.	0	10	38	30	6	1	2	0	0	1	1	1	0	2	1

DATE: 2/23/80 NATURAL ICING ENCOUNTER FLIGHT 17 TAPE RECORD # 201

TIME (LST)	IRU (CNTS)	MK 10 (G/M3)	MK 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	AVG (MD)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
92438	743.	.03	.20	-8.6	0.00	.10	10	215.	0	8	38	29	4	1	2	1	1	1	1	2	2	4	4
92454	742.	.03	.32	-8.6	0.00	.11	10	286.	0	10	42	25	4	1	2	0	0	1	1	1	1	3	2
92510	751.	.04	.37	-8.3	0.00	.11	9	310.	0	15	51	16	2	0	1	0	1	0	1	1	1	2	1
92526	765.	.05	.03	-8.0	0.00	.10	9	279.	0	17	46	15	3	1	1	1	1	1	2	1	2	2	3
92542	765.	.05	.10	-7.6	0.00	.05	8	251.	0	41	47	8	1	0	0	0	0	0	0	0	0	0	0
92558	765.	.05	.14	-7.2	0.00	.00	6	20.	0	61	27	6	1	3	0	0	0	0	0	0	0	0	0
92614	765.	.05	.14	-6.7	0.00	.00	13	0.	0	21	23	0	55	0	0	0	0	0	0	0	0	0	0
92630	765.	.05	.14	-6.3	0.00	.00	8	0.	0	37	62	0	0	0	0	0	0	0	0	0	0	0	0
92646	765.	.05	.14	-6.0	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
927 2	765.	.05	.13	-6.3	0.00	.00	6	10.	0	81	15	2	0	0	0	0	0	0	0	0	0	0	0
92718	765.	.05	.14	-7.5	0.00	.00	6	15.	0	83	15	1	0	0	0	0	0	0	0	0	0	0	0
92734	765.	.05	.14	-7.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
92750	763.	.05	.14	-7.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
928 6	764.	.02	.13	-6.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
92822	765.	.00	.12	-6.4	0.00	.00	7	0.	0	54	45	0	0	0	0	0	0	0	0	0	0	0	0
92838	765.	.00	.12	-6.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
92854	765.	.00	.11	-6.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
92910	765.	.00	.11	-6.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
92926	765.	.00	.10	-6.3	0.00	.00	33	0.	0	0	0	1	1	2	4	6	9	12	16	0	0	0	42
92942	764.	.00	.10	-6.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
92958	765.	.00	.09	-6.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
93014	765.	.00	.08	-5.8	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
93030	765.	.00	.08	-5.6	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
93046	765.	.00	.07	-5.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
931 2	765.	.00	.06	-5.8	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
93118	765.	.00	.05	-6.0	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
93134	765.	.00	.05	-6.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
93150	765.	.00	.04	-6.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
932 6	765.	.00	.03	-6.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
93222	765.	.00	.03	-6.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
93238	765.	.00	.03	-6.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
93254	765.	.00	.02	-6.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
93310	765.	.00	.01	-6.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
93326	765.	.00	.01	-6.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
93342	765.	.00	0.00	-6.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
93358	765.	.00	0.00	-6.8	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0

NATURAL ICING ENCOUNTER FLIGHT 17
AIRCRAFT STATE PARAMETERS (JUN-1H 31R)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
8 822	15.3	666.	.27	68.9	5.0
8 838	15.3	666.	.27	68.2	6.5
8 854	15.3	666.	.27	68.6	5.6
8 910	15.3	666.	.27	68.5	5.6
8 926	15.3	668.	.27	69.1	5.5
8 942	15.1	668.	.27	68.9	5.0
8 958	15.1	668.	.27	67.6	4.7
81014	15.1	670.	.27	69.0	4.2
81030	14.7	672.	.27	67.3	4.2
81046	14.4	670.	.53	67.7	4.7
811 2	24.5	631.	4.30	85.6	4.0
81116	35.4	627.	5.79	98.7	1.7
81134	38.2	637.	6.01	101.7	1.6
81150	39.6	633.	6.22	104.1	2.5
812 6	37.9	627.	5.97	100.8	3.7
81222	32.2	629.	4.89	90.4	3.2
8123R	15.4	682.	.26	66.9	3.9
81254	14.8	676.	.27	67.5	4.2
81310	14.9	674.	.27	67.8	5.0
81326	14.9	674.	.27	68.1	5.0
81342	14.9	674.	.27	68.1	4.8
81358	14.9	674.	.27	68.1	4.8
81414	14.8	676.	.27	67.5	4.8
81430	12.6	727.	.27	65.1	4.2
81446	14.7	676.	.27	67.8	4.6
815 2	12.5	676.	.26	64.9	5.3
81518	14.6	676.	.27	67.6	5.7
81534	14.7	676.	.27	67.1	5.5
81550	14.9	676.	.27	67.2	5.3
816 6	14.9	676.	.27	68.0	5.0
81622	14.7	678.	.27	67.4	5.1
8163R	13.1	676.	.27	65.6	5.(
81654	14.8	678.	.27	68.5	4.6
81710	14.6	678.	.27	67.9	5.1
81726	14.5	678.	.27	67.8	4.8
81742	14.7	676.	.27	67.9	4.9
81758	14.7	676.	.27	67.5	4.9
81814	14.7	678.	.27	67.1	5.0
81830	14.7	678.	.27	67.0	4.7
81846	14.7	678.	.41	67.2	5.4
819 2	22.2	643.	3.87	82.3	4.0
81918	39.0	641.	6.38	104.4	32.8
81934	41.5	782.	6.60	107.4	45.6
81950	41.3	1003.	6.60	106.4	29.4
820 6	40.8	1205.	6.60	104.9	32.3
82022	39.9	1486.	6.60	103.4	52.1
82038	39.7	1767.	6.60	102.6	67.7
82054	41.0	1978.	6.60	105.8	73.9
82110	40.4	2175.	6.60	105.9	75.6
82126	39.9	2412.	6.60	105.6	73.9

NATIONAL ICING ENCOUNTER FLIGHT 17
AIRCRAFT STATE PARAMETERS (JUN-1M 31R)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
82142	39.5	2689.	6.60	104.1	66.8
82158	39.4	2868.	6.59	103.7	71.4
82214	39.0	3100.	6.60	102.7	70.9
82230	39.1	3313.	6.60	102.2	70.9
82246	39.0	3511.	6.60	101.6	69.8
823 2	39.0	3679.	6.59	101.1	70.5
82318	39.0	3882.	6.59	100.7	67.5
82334	38.9	4071.	6.59	100.3	68.3
82350	39.1	4217.	6.59	100.3	72.7
824 6	38.9	4376.	6.59	99.4	70.9
82422	35.4	4531.	6.60	95.6	68.2
82438	31.3	4513.	6.13	91.7	89.4
82454	31.4	4480.	6.04	92.2	86.5
82510	31.3	4446.	5.60	88.4	84.2
82526	30.4	4314.	5.37	87.4	90.3
82542	35.7	4190.	6.09	96.6	88.9
82558	36.6	4174.	6.15	97.5	88.4
82614	35.2	4208.	6.03	95.2	84.6
82630	35.0	4183.	6.01	95.1	86.5
82646	35.0	4153.	6.01	95.3	87.0
827 2	35.4	4096.	6.04	96.1	89.6
82718	35.4	4032.	6.04	96.3	90.1
82734	36.5	4025.	6.21	97.9	86.6
82750	36.9	4046.	6.30	98.5	82.0
828 6	37.2	4066.	6.33	98.8	85.7
82822	37.4	4068.	6.33	99.3	84.0
82838	37.4	4076.	6.33	99.2	87.7
82854	37.9	4032.	6.32	100.1	94.6
82910	37.7	4000.	6.32	99.8	91.1
82926	37.8	3971.	6.32	100.1	90.9
581164	15.3	1502.	2.52	39.1	54.2
581174	15.4	1488.	2.52	39.2	54.2
316419	18.6	11364.	2.10	31.0	145.5
275919	12.9	7260.	1.56	27.6	116.1

NATURAL ICING ENCOUNTER FLIGHT 17
AIRCRAFT STATE PARAMETERS (JUN-JH 31P)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
83118	36.8	4084.	6.32	99.3	85.7
83134	38.3	4027.	6.31	100.8	91.3
83150	37.4	4021.	6.32	99.6	84.6
832 6	37.5	4023.	6.32	99.8	88.7
83222	37.5	4025.	6.32	99.8	90.6
83238	37.5	4011.	6.32	99.9	88.1
83254	36.1	3998.	6.32	99.3	84.7
83310	37.4	4011.	6.32	99.9	88.2
83326	37.4	4016.	6.32	99.9	87.2
83342	37.2	4034.	6.32	99.5	85.4
83358	37.2	4043.	6.32	99.7	87.8
83414	37.4	4041.	6.32	99.9	85.6
83430	37.3	4055.	6.32	99.9	88.1
83446	37.3	4052.	6.32	99.7	89.[illegible]
835 2	37.3	4039.	6.32	99.8	88.8
83518	37.4	4009.	6.32	100.0	90.7
83534	37.3	4007.	6.32	99.9	91.7
83550	37.1	4027.	6.32	99.6	89.1
836 6	37.0	4048.	6.32	99.4	88.1
83622	37.1	4044.	6.30	99.6	91.[illegible]
83638	35.6	4049.	6.19	97.3	85.1
83654	35.7	4100.	6.18	97.7	88.2
83710	35.7	4073.	6.18	97.8	87.8
83726	35.7	4059.	6.18	97.9	88.9
83742	35.7	4050.	6.18	97.9	89.3
83758	35.7	4025.	6.18	97.9	90.3
83814	35.6	4000.	6.17	97.6	89.7
83830	35.6	3984.	6.17	97.9	90.1
83846	35.5	3984.	6.18	97.8	87.0
839 2	35.6	3916.	6.17	98.0	90.6
83918	35.4	3952.	6.17	97.6	87.4
83934	36.6	3896.	6.31	99.5	90.8
83950	37.3	3950.	6.41	100.3	88.7
840 6	37.4	3961.	6.41	100.4	90.4
84022	37.2	3993.	6.41	100.2	87.0
84038	37.3	3980.	6.41	100.3	91.9
84054	34.6	4018.	6.42	98.3	89.4
84110	35.9	4094.	6.41	99.1	85.[illegible]
84126	37.8	4119.	6.41	100.7	89.[illegible]
84142	36.5	4066.	6.22	98.8	93.1
84158	34.7	4007.	6.08	95.5	90.5
84214	35.0	3996.	6.22	97.2	85.6
84230	37.4	4096.	6.55	100.3	82.0
84246	37.2	4162.	6.47	99.7	86.8
843 2	34.7	4176.	6.11	96.2	91.5
84318	34.4	4174.	6.12	96.0	87.1
84334	34.6	4119.	6.08	96.4	91.9
84350	34.8	4087.	6.11	96.6	91.8
844 6	33.9	4089.	6.04	95.4	85.8
84422	34.3	4057.	6.07	96.0	88.5

NATURAL ICING ENCOUNTER FLIGHT 17
AIRCRAFT STATE PARAMETERS (JUNE 1M 31M)

TIME (EST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
84438	34.3	4059.	6.07	96.1	85.5
84454	34.5	4021.	6.07	96.4	91.4
84510	34.2	4062.	6.07	95.8	84.6
84526	35.1	4011.	6.11	97.4	97.7
84542	35.8	4005.	6.23	98.3	87.4
84558	35.7	4015.	6.23	96.1	86.7
84614	35.8	4041.	6.23	98.2	86.9
84630	36.0	4021.	6.23	98.8	90.5
84646	35.7	4032.	6.23	98.1	88.1
847 2	35.0	4034.	6.23	97.9	90.4
84718	35.8	4044.	6.23	98.1	84.8
84734	35.8	4059.	6.23	98.2	88.8
84750	36.0	4059.	6.23	98.5	90.1
848 6	36.0	4071.	6.23	98.3	88.2
84822	36.1	4086.	6.23	98.5	89.9
84838	36.6	4052.	6.23	99.3	94.0
84854	35.7	4049.	6.18	97.7	86.3
84910	36.1	4075.	6.18	98.5	89.9
84926	35.9	4084.	6.18	98.2	87.7
84942	35.9	4091.	6.18	98.1	87.8
84958	36.5	4071.	6.18	99.1	94.2
85014	35.9	4105.	6.17	98.1	85.4
85030	36.2	4062.	6.18	98.6	92.6
85046	36.1	4034.	6.18	99.8	92.9
851 2	35.9	4052.	6.18	98.3	94.2
85118	35.8	4073.	6.18	97.9	87.6
85134	36.0	4041.	6.18	98.5	92.5
85150	36.5	3984.	6.18	99.3	94.8
852 6	36.2	3971.	6.18	98.7	92.5
85222	35.3	3991.	6.18	97.6	87.9
85238	36.1	3943.	6.18	98.8	91.6
85254	36.0	3950.	6.18	98.5	94.7
85310	35.7	3968.	6.22	98.4	94.1
85326	36.5	3955.	6.22	99.2	87.8
85342	36.1	3984.	6.22	98.6	88.9
85358	35.9	4014.	6.22	98.3	87.4
85414	35.8	4032.	6.22	97.9	85.5
85430	35.9	4005.	6.22	98.7	91.6
85446	36.3	3966.	6.22	99.0	91.8
855 2	36.1	3973.	6.22	98.8	89.8
85518	36.0	3964.	6.22	98.8	89.7
85534	36.0	3982.	6.22	98.5	89.8
85550	35.0	3980.	6.22	97.8	91.0
856 6	35.8	3982.	6.22	98.3	87.7
85622	35.6	4003.	6.22	97.9	83.4
85638	35.7	4048.	6.22	98.1	87.7
85654	35.6	4062.	6.22	97.8	87.4
85710	35.8	4052.	6.22	98.2	88.3
85726	35.6	4064.	6.22	97.8	87.4
85742	35.7	4082.	6.22	98.0	88.1

NATURAL ICING ENCOUNTER FLIGHT 17
AIRCRAFT STATE PARAMETERS (JUN-1M 31A)

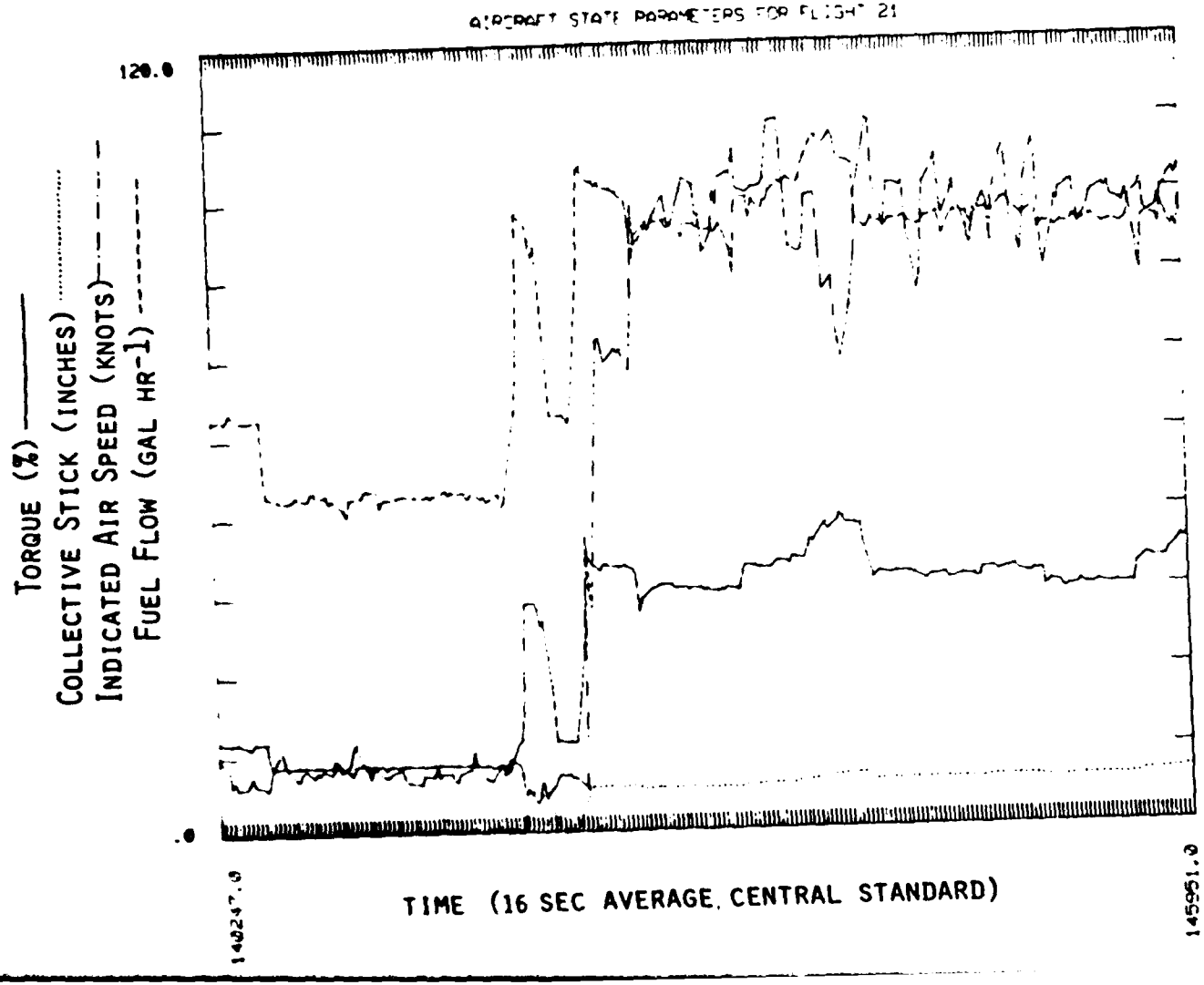
TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
8575A	34.5	4116.	6.22	97.3	A5.3
85814	33.4	4123.	6.27	97.2	A5.5
85830	39.9	4108.	6.71	103.7	A5.2
85846	40.6	4203.	6.78	104.5	A9.7
859 2	40.6	4265.	6.70	104.4	A9.0
8591A	41.A	4355.	6.91	105.9	AA.6
85934	42.3	4459.	6.9A	106.3	AA.5
85950	41.7	4524.	6.94	106.1	A9.7
9 0 6	41.9	4605.	6.93	105.7	A6.6
9 022	41.2	4675.	6.94	106.0	94.2
9 03A	39.4	475A.	6.96	102.4	A4.0
9 054	3A.5	4835.	6.97	101.4	A9.3
9 110	3A.2	4927.	6.9A	100.A	A7.9
9 126	3A.0	5029.	6.9A	100.4	A6.0
9 142	36.9	5057.	6.9A	100.0	92.0
9 15A	36.2	5064.	6.79	96.4	95.6
9 214	34.1	5057.	6.45	94.6	93.0
9 230	34.2	5014.	6.45	94.8	94.A
9 246	34.4	4929.	6.45	95.1	96.6
9 3 2	33.A	4894.	6.35	93.1	92.5
9 31A	31.A	4901.	6.1A	90.4	A7.2
9 334	32.0	4926.	6.02	90.3	95.0
9 350	31.A	4744.	5.A1	A9.7	93.9
9 4 6	31.A	4643.	5.A0	91.4	92.3
9 422	34.4	4562.	6.0A	94.6	A9.5
9 43A	36.A	4543.	6.34	97.9	AA.5
9 454	37.5	4513.	6.33	99.3	94.3
9 510	37.7	4466.	6.33	99.4	94.5
9 52A	3A.0	4411.	6.33	100.4	95.5
9 542	37.A	4365.	6.34	100.0	93.3
9 55A	37.3	4402.	6.33	99.3	AA.6
9 614	37.3	4439.	6.33	99.3	AA.6
9 630	37.A	4330.	6.24	100.2	100.2
9 646	34.9	4298.	6.00	96.2	96.0
9 7 2	34.1	4251.	5.90	95.3	94.5
9 71A	34.1	4151.	5.90	95.5	94.0
9 734	34.2	4037.	5.9A	95.A	92.1
9 750	35.1	39AA.	6.21	9A.0	A0.4
9 A 6	37.3	3943.	6.33	100.4	A4.5
9 822	37.2	3943.	6.33	100.2	A0.2
9 83A	36.2	399A.	6.33	9A.6	A5.5
9 854	36.3	4073.	6.33	9A.A	A0.0
9 910	36.7	4073.	6.33	99.3	90.5
9 926	36.7	4062.	6.33	99.4	93.2
9 942	36.2	4062.	6.34	99.2	90.3
9 95A	33.6	4062.	6.34	9A.1	93.7
91014	35.9	4084.	6.35	99.1	A9.6
91030	37.5	412A.	6.50	100.6	A7.4
91046	40.9	4226.	6.91	104.A	A5.5
911 2	40.4	4295.	6.7A	103.A	92.6

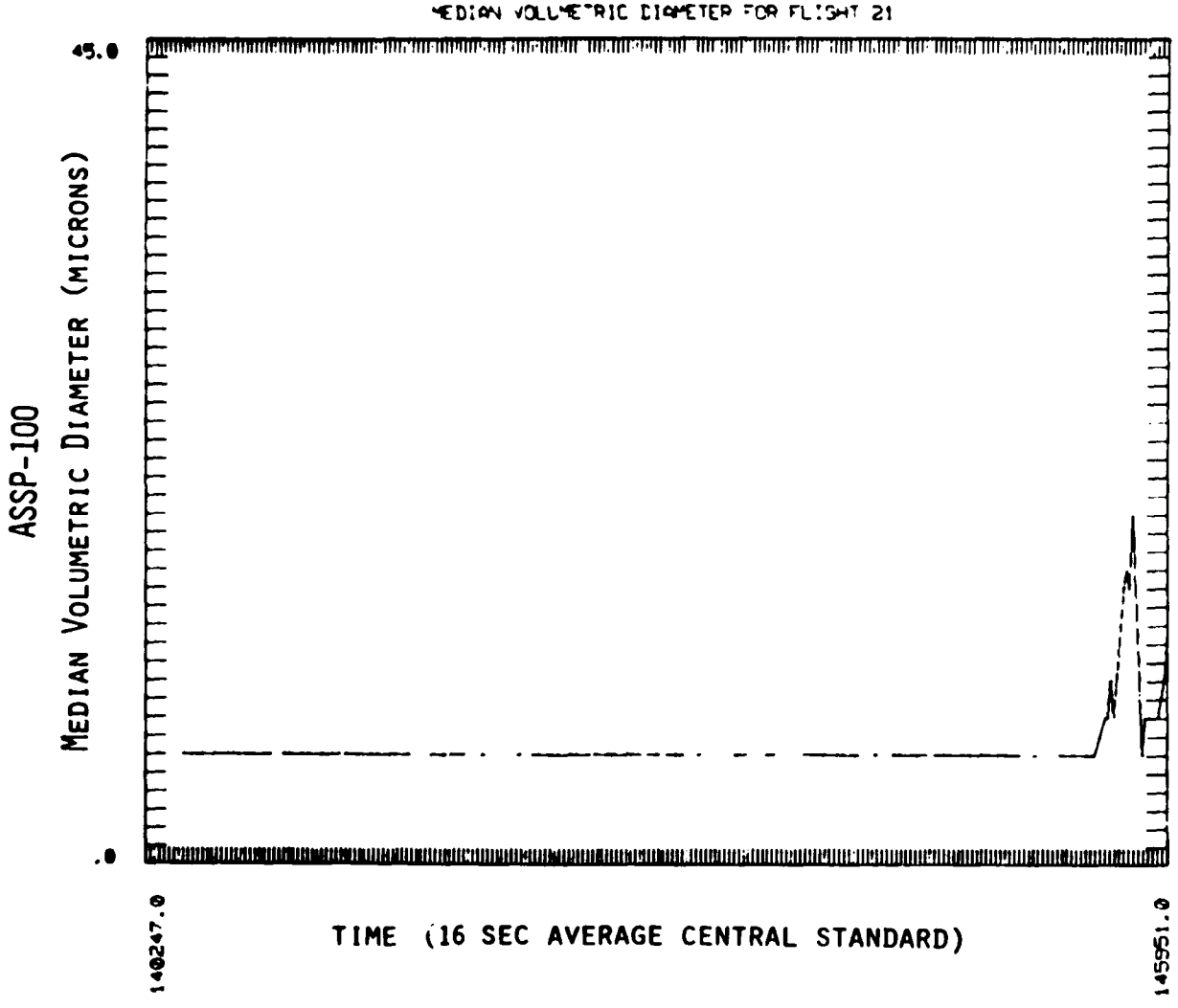
NATIONAL ICING ENCOUNTER FLIGHT 17
AIRCRAFT STATE PARAMETERS (JUN=1H 31A)

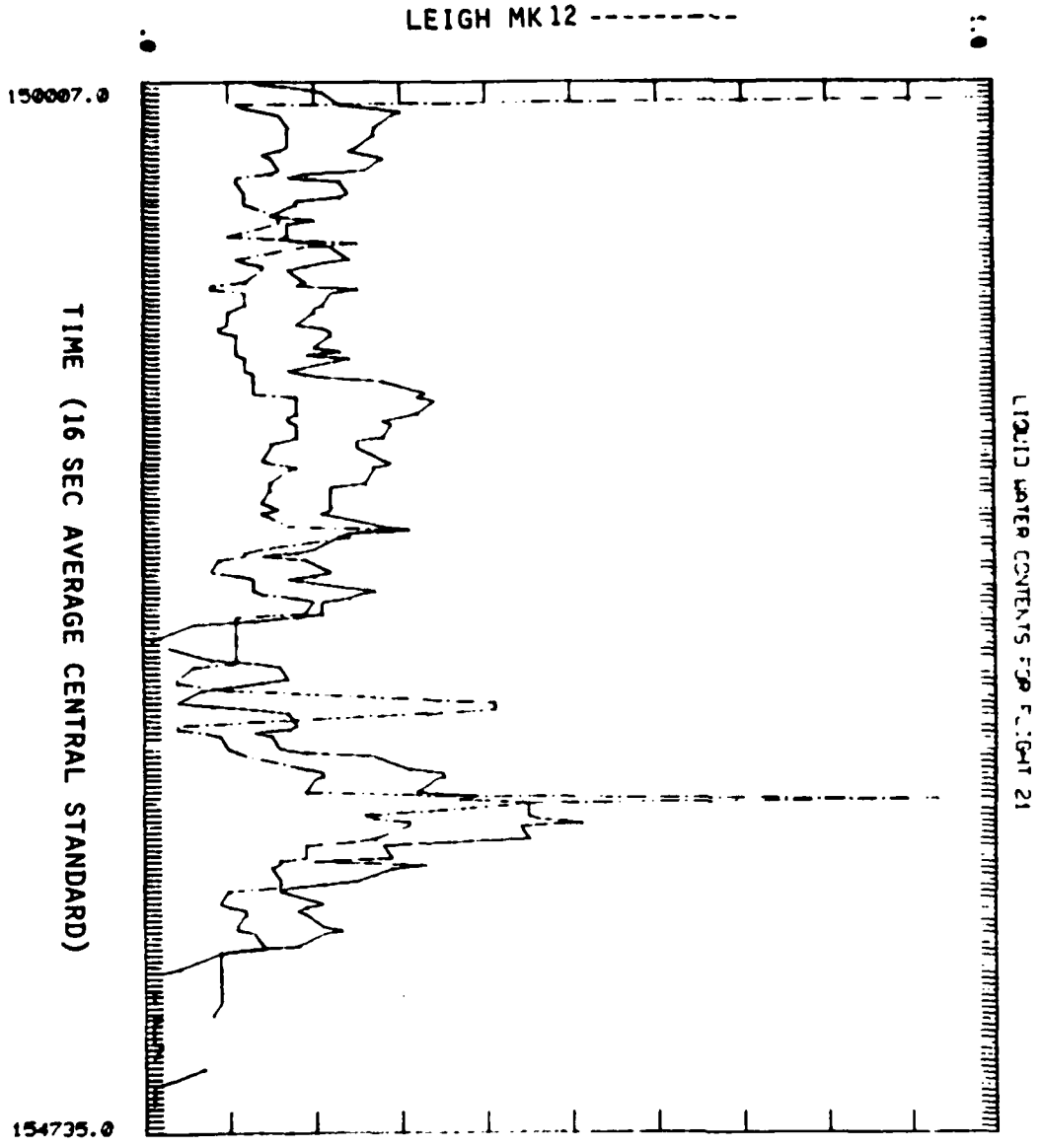
TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
91118	35.1	4245.	5.9H	9H.5	100.6
91134	36.2	4231.	6.2H	9H.5	91.6
91150	36.6	4229.	6.36	9H.9	92.6
912 6	36.4	4254.	6.31	9H.5	H4.2
91222	36.7	4231.	6.3?	9H.6	92.H
9123H	36.3	42H4.	6.31	97.4	H6.2
91254	36.H	42H4.	6.29	9H.7	93.(
91310	36.2	4265.	6.1H	97.6	93.H
91326	35.6	4243.	6.14	97.1	93.(
91342	35.6	4226.	6.15	97.1	93.1
9135H	35.6	4215.	6.13	97.1	H6.7
91414	35.5	4222.	6.14	97.(	HH.5
91430	35.3	4231.	6.14	96.7	H6.H
91446	35.7	4220.	6.15	97.4	9(.H
915 2	35.7	4201.	6.14	97.4	9(.3
9151H	35.4	4249.	6.1H	96.7	H4.2
91534	35.9	42H9.	6.23	97.5	H5.7
91550	36.4	4254.	6.22	9H.2	9(.4
916 6	36.4	4231.	6.22	9H.1	H9.6
91622	35.4	4247.	6.22	97.5	H6.(
9163H	33.6	4305.	6.23	96.(	H3.1
91654	33.6	4300.	5.92	93.9	H0.H
91710	32.4	4174.	5.76	92.7	95.1
9172H	32.3	40H4.	5.71	92.7	93.1
91742	32.5	39H9.	5.70	93.4	95.4
9175H	34.4	3941.	6.03	9(.3	HH.3
91814	37.2	3961.	6.39	99.H	H9.(
9183(	35.7	4041.	6.4(	9H.5	H5.9
9184H	36.1	4005.	6.4(	99.2	94.4
919 2	37.4	39H0.	6.39	100.2	93.1
9191H	37.0	4004H.	6.4(	99.2	H6.7
91934	37.4	4052.	6.39	99.9	92.9
91950	37.H	4052.	6.39	100.1	92.(
920 6	37.5	40H0.	6.39	99.9	91.1
92022	37.3	4103.	6.4(	99.7	91.1
9203H	39.1	40(H.	6.39	100.H	9(.1
92054	37.7	4094.	6.4(	100.1	91.H
92110	37.(	4142.	6.4(	99.1	H4.H
92126	3H.3	4105.	6.39	101.2	97.5
92142	37.3	4123.	6.4(	99.5	9(.(
9215H	37.4	4134.	6.4(	100.(	92.6
92214	37.1	4174.	6.4(	99.6	H9.9
92230	37.6	4151.	6.4(	100.4	95.5
9224H	37.5	4155.	6.4(	100.2	93.6
923 2	35.9	4183.	6.4(	9H.4	9(.H
9231H	34.2	4201.	6.41	9H.6	92.7
92334	34.7	4190.	6.41	99.(	9(.H
92350	35.2	4222.	6.34	9H.1	9(.(
924 6	33.H	4217.	5.96	94.9	92.3
92422	35.4	4197.	6.24	97.2	H7.4

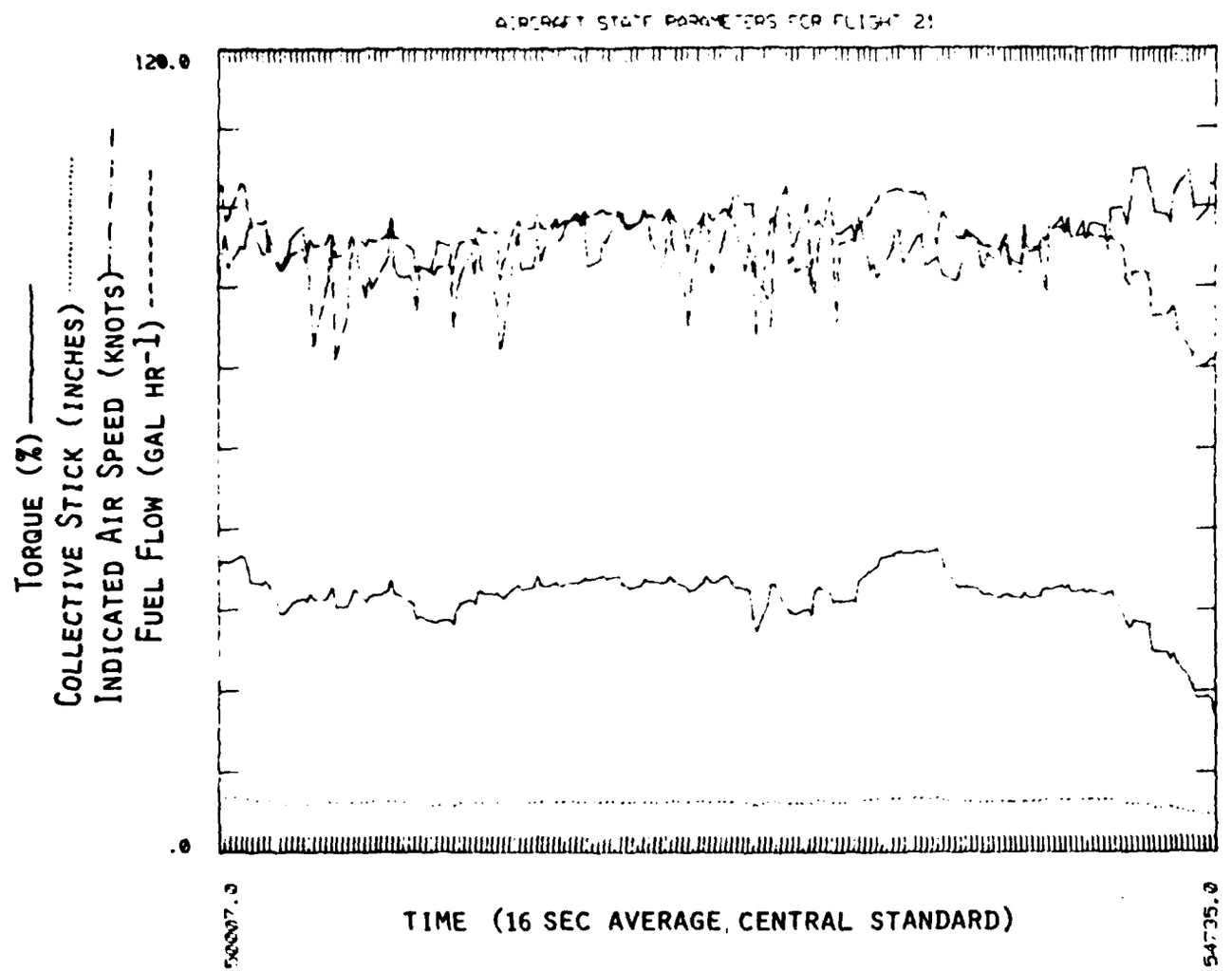
NATURAL ICING ENCOUNTER FLIGHT 17
AIRCRAFT STATE PARAMETERS (JUNE 318)

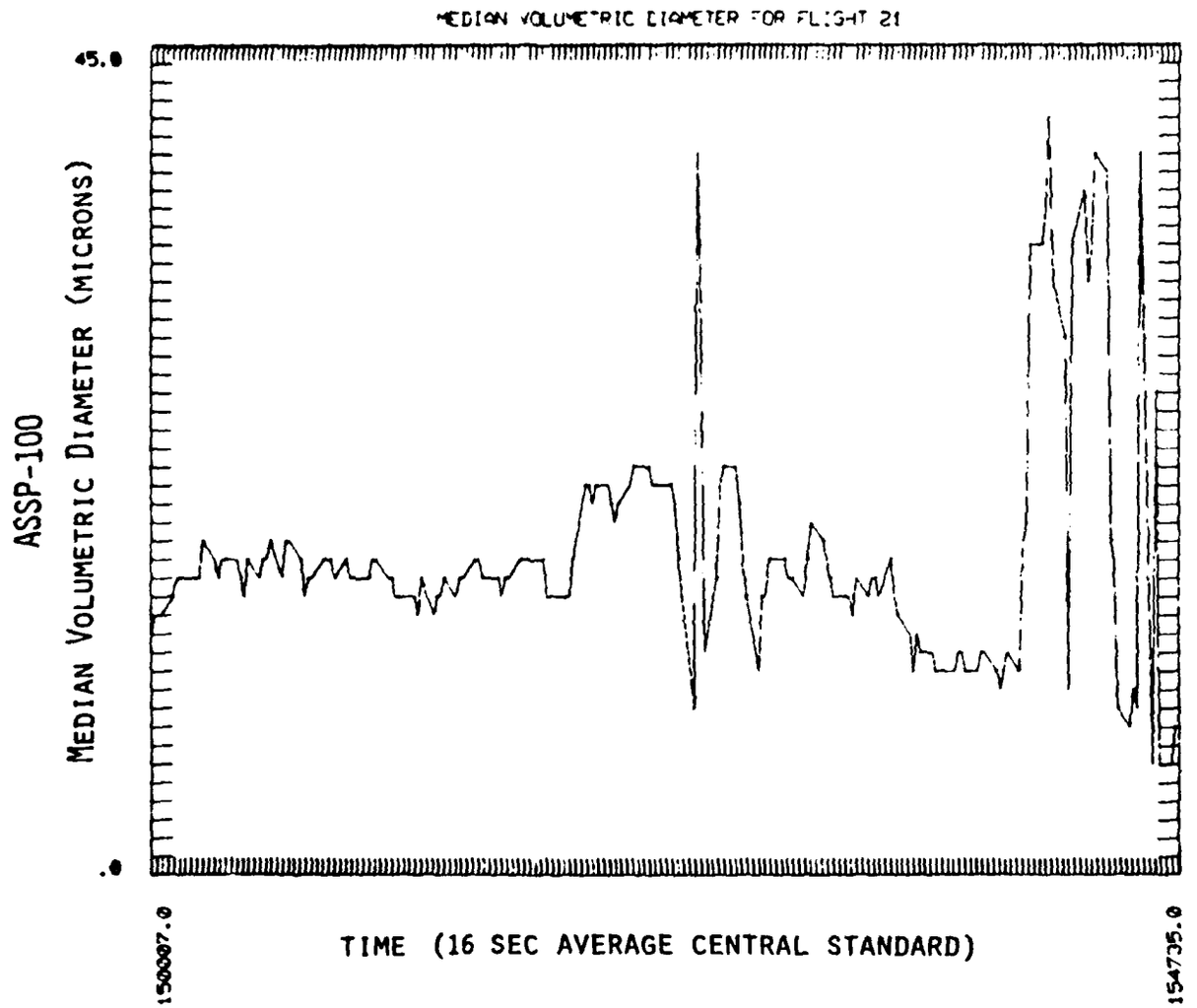
TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
92438	36.6	4178.	6.33	99.0	92.0
92454	29.7	4140.	5.56	89.9	91.4
92510	29.0	4082.	5.35	89.4	90.8
92526	27.0	3955.	4.96	86.6	90.0
92542	26.5	3760.	4.89	85.2	91.0
92558	26.3	3545.	4.84	86.3	95.4
92614	26.2	3307.	4.84	86.3	95.6
92630	26.8	3130.	4.86	86.6	96.4
92646	25.5	2957.	4.80	86.7	91.7
927 2	26.6	2747.	4.84	88.2	101.9
92718	28.4	2455.	4.87	90.1	106.5
92734	28.7	2192.	4.86	91.0	99.2
92750	22.6	2146.	4.89	87.0	84.1
928 6	24.1	2071.	4.84	87.7	85.6
92822	27.5	1974.	4.87	89.2	88.1
92838	31.0	1883.	5.39	95.1	88.5
92854	34.1	1823.	5.74	99.4	91.6
92910	34.1	1810.	5.76	99.3	89.9
92926	34.3	1792.	5.76	99.7	93.5
92942	32.7	1744.	5.76	99.5	98.4
92958	34.1	1658.	5.74	100.3	99.0
93014	32.3	1617.	5.62	96.6	97.6
93030	32.7	1606.	5.60	97.7	97.6
93046	34.5	1633.	5.81	101.2	98.5
931 2	34.6	1680.	5.81	103.6	89.1
9311R	34.6	1715.	5.81	99.4	90.1
93134	34.8	1711.	5.81	99.3	93.8
93150	35.1	1690.	5.81	100.2	95.7
932 6	34.8	1691.	5.81	99.5	92.7
93222	34.7	1697.	5.81	99.5	91.1
93234	35.3	1724.	5.92	100.4	87.5
93250	35.9	1741.	6.00	101.2	87.5
93310	36.0	1747.	5.94	101.3	91.0
93326	35.9	1754.	5.94	101.3	92.2
93342	35.7	1933.	5.96	100.6	89.5
9335R	35.7	1949.	5.97	101.0	90.4


AIRCRAFT STATE PARAMETERS FOR FLIGHT 21
120.0
.0
TORQUE (%)
COLLECTIVE STICK (INCHES)
INDICATED AIR SPEED (KNOTS)
FUEL FLOW (GAL HR-1)
140247.0
145951.0
TIME (16 SEC AVERAGE, CENTRAL STANDARD)


MEDIAN VOLUMETRIC DIAMETER FOR FLIGHT 21
45.0
.0
ASSP-100
MEDIAN VOLUMETRIC DIAMETER (MICRONS)
140247.0
145951.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)


LIQUID WATER CONTENT (GRAMS PER CUBIC METER)
ASSP-100
ROSEMOUNT
LEIGH MK 10
LEIGH MK 12
150007.0
154735.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)


AIRCRAFT STATE PARAMETERS FOR FLIGHT 21
120.0
.0
TORQUE (%)
COLLECTIVE STICK (INCHES)
INDICATED AIR SPEED (KNOTS)
FUEL FLOW (GAL HR-1)
150007.0
154735.0
TIME (16 SEC AVERAGE, CENTRAL STANDARD)


MEDIAN VOLUMETRIC DIAMETER FOR FLIGHT 21
45.0
.0
ASSP-100
MEDIAN VOLUMETRIC DIAMETER (MICRONS)
150007.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)
154735.0

DATE: 3/12/80 NATURAL ICING ENCOUNTER FLIGHT 21 TAPE RECORD # 1

TIME (LST)	IRU (CNTS)	MR 10 (G/M3)	MR 12 (G/M3)	OAT (C)	RSMI (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
14 247	0.	0.00	0.00	3.6	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14 3 3	0.	0.00	0.00	3.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
14 319	88.	.19	0.00	2.6	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
14 335	0.	.00	0.00	3.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
14 351	0.	.00	.00	8.5	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14 4 7	0.	.00	.00	19.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
14 423	0.	.00	.01	31.5	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14 439	0.	.00	.01	35.5	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14 455	0.	.00	.00	42.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
14 511	0.	.00	.00	51.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
14 527	0.	.00	.00	58.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
14 543	0.	.00	.00	60.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
14 559	0.	.00	.00	60.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
14 615	0.	.00	.00	57.8	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
14 631	0.	.00	.00	56.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
14 647	0.	.00	.01	57.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
14 7 3	0.	.00	.01	65.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
14 719	0.	.00	.01	62.0	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
14 735	0.	.00	.00	61.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
14 751	0.	.00	.00	62.9	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
14 8 7	0.	.00	.00	64.6	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
14 823	0.	.00	.00	64.6	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
14 839	0.	.00	.00	61.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
14 855	0.	.00	.00	61.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
14 911	0.	.00	.00	65.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
14 927	0.	.00	.01	64.9	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
14 943	0.	.00	.01	61.6	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
14 959	0.	.00	.01	62.5	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
141015	0.	.00	.01	58.0	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
141031	0.	.00	.01	56.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
141047	0.	.00	.01	51.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1411 3	0.	.00	.01	54.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
141119	0.	.00	.01	57.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
141135	0.	.00	.01	60.6	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
141151	0.	.00	.01	57.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1412 7	0.	.00	.02	61.6	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
141223	0.	.00	.02	62.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
141239	0.	.00	.02	60.8	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
141255	0.	.00	.02	64.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
141311	0.	.00	.02	65.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
141327	0.	.00	.01	59.0	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
141343	0.	.00	.01	60.8	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
141359	0.	.00	.01	64.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
141415	0.	.00	.01	67.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
141431	0.	.00	.01	71.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
141447	0.	.00	.01	67.6	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1415 3	0.	.00	.02	63.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
141519	0.	.00	.02	61.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
141535	0.	.00	.02	63.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
141551	0.	.00	.02	60.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0

DATE: 3/12/80 NATURAL ICING ENCOUNTER FLIGHT 21 TAPE RECORD # 51

TIME (LST)	IRU (CNTS)	MR 10 (G/M3)	MR 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NDM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
1416 7	0.	.00	.02	62.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
141623	0.	.00	.02	61.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
141639	0.	.00	.02	64.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
141655	0.	.00	.02	61.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
141711	90.	.00	.02	63.0	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
141727	0.	.00	.02	67.6	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
141743	0.	.00	.02	64.0	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
141759	0.	.00	.02	60.4	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
141815	0.	.00	.02	63.3	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
141831	0.	.00	.02	66.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
141847	0.	.00	.03	69.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1419 3	0.	.00	.03	65.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
141919	0.	.00	.03	67.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
141935	0.	.00	.03	62.9	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
141951	0.	.00	.03	56.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1420 7	0.	.00	.02	54.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
142023	0.	.00	.02	55.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
142039	0.	.00	.02	65.1	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
142055	0.	.00	.02	72.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
142111	0.	.00	0.00	72.2	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
142127	0.	.00	0.00	70.6	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
142143	0.	.00	.01	62.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
142159	0.	.00	.01	61.5	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
142215	0.	.00	.00	72.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
142231	0.	.00	0.00	72.2	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
142247	0.	.00	0.00	72.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1423 3	0.	.00	0.00	72.2	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
142319	0.	0	0.00	72.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
142335	0.	0	0.00	72.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
142351	0.	0	0.00	72.2	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1424 7	0.	.00	0.00	72.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
142423	0.	.00	0.00	47.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
142439	0.	.00	.00	11.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
142455	0.	.00	.01	5.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
142511	0.	.00	.00	3.0	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
142527	0.	.00	0.00	1.8	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
142543	0.	.00	0.00	1.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
142559	0.	.00	0.00	.8	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
142615	0.	.00	0.00	.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
142631	0.	.00	0.00	-.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
142647	0.	.00	0.00	-.9	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1427 3	0.	.00	0.00	-1.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
142719	0.	.00	0.00	-2.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
142735	0.	.00	0.00	-2.5	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
142751	0.	.00	0.00	-2.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1428 7	0.	.00	0.00	-2.8	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
142823	0.	.00	0.00	-2.9	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
142839	0.	.00	0.00	-3.0	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
142855	0.	.00	0.00	-3.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
142911	0.	.00	0.00	-3.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0

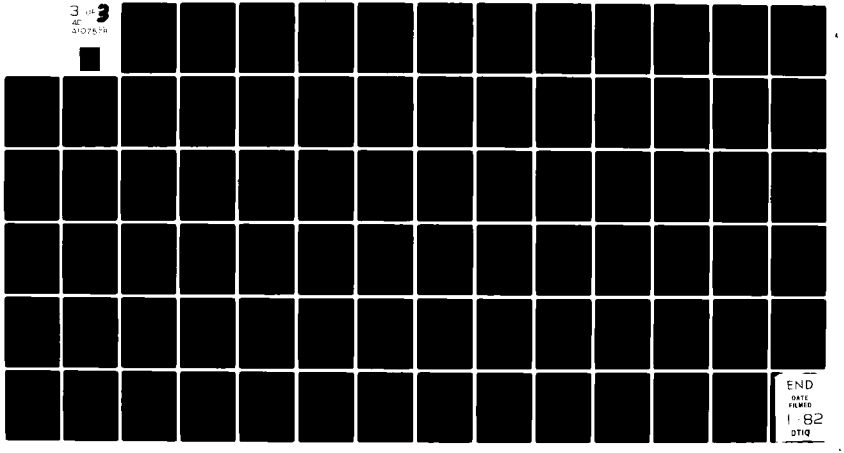
DATE: 3/12/80 NATURAL ICING ENCOUNTER FLIGHT 21 TAPE RECORD # 101

TIME (LST)	IRU (CNTS)	4K 10 (G/M3)	4K 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
142927	0.	.00	0.00	-3.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
142943	0.	.00	0.00	-3.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
142959	0.	.00	0.00	-3.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
143015	0.	.00	0.00	-2.9	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
143031	0.	.00	0.00	-3.0	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
143047	0.	.00	0.00	-3.0	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1431 3	0.	.00	0.00	-2.9	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
143119	0.	.00	0.00	-2.9	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
143135	0.	.00	0.00	-2.8	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
143151	0.	.00	0.00	-2.9	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1432 7	0.	.00	0.00	-2.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
143223	0.	.00	0.00	-2.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
143239	0.	.00	0.00	-2.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
143255	0.	.00	0.00	-2.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
143311	0.	.00	0.00	-2.9	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
143327	0.	.00	0.00	-2.8	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
143343	0.	.00	0.00	-2.6	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
143359	0.	.00	0.00	-2.9	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
143415	0.	.00	0.00	-2.9	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
143431	0.	.00	0.00	-3.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
143447	0.	.00	0.00	-3.3	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1435 3	0.	.00	0.00	-3.2	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
143519	0.	.00	0.00	-3.2	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
143535	0.	.00	0.00	-3.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
143551	0.	.00	0.00	-3.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1436 7	0.	.00	0.00	-3.0	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
143623	0.	.00	0.00	-3.0	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
143639	0.	.00	0.00	-3.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
143655	0.	.00	0.00	-3.0	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
143711	0.	.00	0.00	-3.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
143727	0.	.00	0.00	-3.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
143743	0.	.00	0.00	-3.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
143759	0.	.00	0.00	-2.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
143815	0.	.00	0.00	-1.8	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
143831	0.	.00	0.00	-.8	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
143847	0.	.00	0.00	-.1	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1439 3	0.	.00	0.00	.1	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
143919	0.	.00	0.00	.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
143935	0.	.00	0.00	1.0	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
143951	0.	.00	0.00	1.6	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1440 7	0.	.00	0.00	2.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144023	0.	.00	0.00	1.8	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144039	0.	.00	0.00	1.6	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144055	0.	.00	0.00	1.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144111	0.	.00	0.00	1.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144127	0.	.00	0.00	1.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144143	0.	.00	0.00	1.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144159	0.	.00	0.00	1.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144215	0.	.00	0.00	1.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144231	0.	.00	0.00	1.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0

DATE: 3/12/80 NATURAL ICING ENCOUNTER FLIGHT 21 TAPE RECORD # 151

TIME (LST)	IRU (CNTS)	MR 10 (G/M3)	MR 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
144247	0.	.00	0.00	1.3	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1443 3	0.	.00	0.00	1.3	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
144319	0.	.00	0.00	1.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144335	0.	.00	0.00	1.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144351	0.	.00	0.00	1.6	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1444 7	0.	.00	0.00	2.1	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
144423	0.	.00	0.00	2.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144439	0.	.00	0.00	2.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144455	0.	.00	0.00	2.1	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144511	0.	.00	0.00	2.0	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144527	0.	.00	0.00	1.9	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144543	0.	.00	0.00	1.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144559	0.	.00	0.00	1.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144615	0.	.00	0.00	1.9	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144631	0.	.00	0.00	1.9	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
144647	0.	.00	0.00	1.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1447 3	0.	.00	0.00	1.6	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144719	0.	.00	0.00	1.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144735	0.	.00	0.00	1.9	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144751	0.	.00	0.00	2.0	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1448 7	0.	.00	0.00	1.9	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144823	0.	.00	0.00	1.6	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144839	0.	.00	0.00	1.6	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144855	0.	.00	0.00	1.9	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144911	0.	.00	0.00	1.8	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144927	0.	.00	0.00	2.0	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144943	0.	.00	0.00	2.0	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
144959	0.	.00	0.00	2.0	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
145015	0.	.00	0.00	2.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
145031	0.	.00	0.00	2.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
145047	0.	.00	0.00	2.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1451 3	0.	.00	0.00	2.0	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
145119	0.	.00	0.00	1.9	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
145135	0.	.00	0.00	2.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
145151	0.	.00	0.00	2.8	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
452 7	0.	.00	0.00	2.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
45223	0.	.00	0.00	2.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
45239	0.	.00	0.00	2.5	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45255	0.	.00	.00	2.4	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
45311	0.	.00	.01	2.2	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45327	0.	.00	.01	1.8	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45343	0.	.00	.01	1.8	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45359	0.	.00	.02	2.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
45415	0.	.00	.01	2.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
45431	0.	.00	.02	2.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
45447	0.	.00	.01	2.3	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
45503	0.	.00	.00	2.6	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
45519	0.	.00	.01	2.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
45535	0.	.00	.01	2.7	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
45551	0.	.00	.01	2.6	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0

AD-A107 578 METEOROLOGY RESEARCH INC ALTADENA CA F/G 4/2
DROPLET SIZE AND LIQUID WATER CHARACTERISTICS OF THE USAAEFA (C--ETC(U)
AUG 80 M E HUMBERT, L J JAHNSEN, L D DZAMBA DAAK51-80-C-0003
UNCLASSIFIED MRI-80-FR-1748 NL



DATE: 3/12/80 NATIONAL ICING ENCOUNTER FLIGHT 21 TAPE RECORD # 201

TIME (LST)	IRU (CNTS)	MK 10 (G/M3)	MK 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
1456 7	0.	.00	.01	2.6	0.00	.00	8	0.	0	37	62	0	0	0	0	0	0	0	0	0	0	0	0
145623	0.	.00	.02	2.6	0.00	.00	8	0.	0	37	62	0	0	0	0	0	0	0	0	0	0	0	0
145639	0.	.00	.02	3.0	0.00	.00	10	0.	0	20	23	55	0	0	0	0	0	0	0	0	0	0	0
145655	0.	.00	.02	3.3	0.00	.00	8	0.	0	22	77	0	0	0	0	0	0	0	0	0	0	0	0
145711	0.	.00	.03	3.3	0.00	.00	15	0.	0	4	11	13	25	44	0	0	0	0	0	0	0	0	0
145727	0.	.00	.03	3.5	0.00	.00	16	0.	0	6	6	32	0	54	0	0	0	0	0	0	0	0	0
145743	0.	.00	.03	3.2	0.00	.00	15	0.	0	4	11	13	25	44	0	0	0	0	0	0	0	0	0
145759	0.	.00	.04	3.0	0.00	.00	19	0.	0	2	8	10	20	0	56	0	0	0	0	0	0	0	0
145815	0.	.00	.06	2.7	0.00	.01	6	75.	0	72	24	2	0	0	0	0	0	0	0	0	0	0	0
145831	0.	.00	.08	2.5	0.00	.04	8	165.	0	39	39	16	3	0	0	0	0	0	0	0	0	0	0
145847	0.	.00	.12	2.5	0.00	.02	8	89.	0	28	44	21	4	0	0	0	0	0	0	0	0	0	0
1459 3	0.	.00	.12	2.5	0.00	.01	8	35.	0	42	31	18	4	1	2	0	0	0	0	0	0	0	0
145919	0.	.00	.13	2.3	0.00	.02	9	63.	0	25	36	25	8	1	0	1	0	0	0	0	0	0	0
145935	0.	.00	.16	2.0	0.00	.05	10	125.	0	14	35	32	13	2	1	0	0	0	0	0	0	0	0
145951	0.	.00	.24	1.7	0.00	.14	12	217.	0	5	21	35	26	9	1	0	0	0	0	0	0	0	0
15 0 7	0.	.12	.37	1.4	0.00	.15	13	179.	0	4	14	30	35	15	2	0	0	0	0	0	0	0	0
15 023	0.	2.99	.26	1.3	0.00	.14	14	167.	0	3	11	28	37	16	2	0	0	0	0	0	0	0	0
15 039	0.	2.99	.17	1.0	0.00	.19	14	210.	0	3	10	25	37	19	3	0	0	0	0	0	0	0	0
15 055	3.	2.21	.33	.7	0.00	.21	14	219.	0	3	9	21	33	24	6	0	0	0	0	0	0	0	0
15 111	24.	.11	.11	.5	0.00	.23	15	228.	0	2	9	18	25	27	13	2	0	0	0	0	0	0	0
15 127	26.	.12	.32	.2	0.00	.27	16	220.	0	2	7	15	22	29	19	4	0	0	0	0	0	0	0
15 143	45.	.14	.15	.1	0.00	.30	16	252.	0	2	7	18	19	21	20	8	1	0	0	0	0	0	0
15 159	55.	.16	.24	-.0	0.00	.29	16	249.	0	2	8	18	21	19	18	8	1	0	0	0	0	0	0
15 215	67.	.17	.28	-.1	0.00	.27	16	238.	0	2	8	18	22	18	18	8	1	0	0	0	0	0	0
15 231	86.	.17	.16	-.1	0.00	.27	16	228.	0	2	8	18	20	18	20	10	1	0	0	0	0	0	0
15 247	91.	.17	.30	-.2	0.00	.27	18	177.	0	1	5	11	16	19	24	15	2	0	0	0	0	0	0
15 3 3	114.	.17	.19	-.1	0.00	.25	17	201.	0	2	7	16	20	19	20	10	2	0	0	0	0	0	0
15 319	116.	.16	.36	.0	0.00	.24	16	201.	0	2	7	17	22	21	17	8	1	0	0	0	0	0	0
15 335	137.	.14	.13	.1	0.00	.26	17	183.	0	1	5	12	20	26	23	7	1	0	0	0	0	0	0
15 351	139.	.15	.35	-.1	0.00	.28	17	168.	0	1	4	8	20	34	22	6	1	0	0	0	0	0	0
15 4 7	161.	.16	.14	-.3	0.00	.26	17	159.	0	1	4	9	23	32	20	6	1	0	0	0	0	0	0
15 423	162.	.15	.30	-.2	0.00	.19	16	142.	0	1	5	14	31	27	13	3	0	0	0	0	0	0	0
15 439	178.	.11	.15	.2	0.00	.17	15	142.	0	1	6	18	32	23	11	2	0	0	0	0	0	0	0
15 455	179.	.11	.34	.6	0.00	.23	17	154.	0	1	5	12	18	26	25	8	1	0	0	0	0	0	0
15 511	198.	.12	.13	.5	0.00	.24	16	191.	0	2	7	16	23	25	18	5	1	0	0	0	0	0	0
15 527	198.	.12	.32	.2	0.00	.23	17	163.	0	1	5	13	21	22	22	10	2	0	0	0	0	0	0
15 543	216.	.12	.09	.2	0.00	.18	17	150.	0	2	8	16	18	21	21	8	2	0	0	0	0	0	0
15 559	218.	.12	.35	.3	0.00	.18	18	128.	0	1	6	12	16	21	26	12	2	0	0	0	0	0	0
15 615	242.	.16	.25	.6	0.00	.15	16	141.	0	2	9	17	20	22	20	7	0	0	0	0	0	0	0
15 631	244.	.16	.18	.5	0.00	.20	18	117.	0	1	4	8	15	28	30	10	1	0	0	0	0	0	0
15 647	244.	.16	.34	.3	0.00	.17	18	106.	0	1	5	9	16	28	27	9	1	0	0	0	0	0	0
15 7 3	261.	.10	.09	.3	0.00	.17	17	140.	0	2	8	14	18	23	22	8	1	0	0	0	0	0	0
15 719	275.	.16	.17	.4	0.00	.16	15	152.	0	2	9	20	20	19	17	7	1	0	0	0	0	0	0
15 735	297.	.25	.18	.2	0.00	.20	16	164.	0	2	7	16	22	22	19	8	1	0	0	0	0	0	0
15 751	302.	.19	.38	.1	0.00	.22	16	182.	0	2	7	15	22	23	19	7	1	0	0	0	0	0	0
15 8 7	315.	.11	.14	.1	0.00	.24	17	178.	0	1	6	13	19	24	22	9	1	0	0	0	0	0	0
15 823	318.	.12	.38	.1	0.00	.21	17	141.	0	1	5	11	20	29	23	6	1	0	0	0	0	0	0
15 839	339.	.14	.11	-.0	0.00	.19	17	141.	0	1	6	13	18	25	23	8	1	0	0	0	0	0	0
15 855	339.	.14	.26	.1	0.00	.17	16	149.	0	2	8	16	19	18	19	10	2	0	0	0	0	0	0
15 911	344.	.12	.38	.1	0.00	.19	17	157.	0	2	8	15	17	19	21	12	2	0	0	0	0	0	0

DATE: 3/12/80 NATURAL ICING ENCOUNTER FLIGHT 21 TAPE RECORD # 251

TIME (LST)	IRU (CNTS)	MR 10 (G/M3)	MR 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (M/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
15 927	357.	.08	.08	.1	0.00	.18	16	163.	0	2	8	18	23	20	15	8	1	0	0	0	0	0	0
15 943	357.	.08	.29	.2	0.00	.25	16	206.	0	1	6	17	26	22	14	7	1	0	0	0	0	0	0
15 959	375.	.12	.18	.3	0.00	.22	16	189.	0	2	7	17	25	22	14	6	1	0	0	0	0	0	0
151015	381.	.12	.23	.3	0.00	.21	16	172.	0	2	7	17	23	19	17	10	1	0	0	0	0	0	0
151031	388.	.11	.30	.1	0.00	.20	17	152.	0	1	6	14	20	22	22	9	1	0	0	0	0	0	0
151047	398.	.10	.14	.0	0.00	.20	17	145.	0	1	5	13	21	28	21	6	1	0	0	0	0	0	0
1511 3	398.	.10	.33	-.0	0.00	.18	16	132.	0	1	5	13	27	30	16	3	0	0	0	0	0	0	0
151119	414.	.09	.15	.1	0.00	.21	16	148.	0	1	5	12	25	33	17	3	0	0	0	0	0	0	0
151135	418.	.09	.31	.3	0.00	.22	15	189.	0	2	7	17	32	28	10	1	0	0	0	0	0	0	0
151151	432.	.11	.15	.2	0.00	.22	15	202.	0	2	7	19	35	25	6	0	0	0	0	0	0	0	0
1512 7	436.	.11	.29	.0	0.00	.20	15	181.	0	2	7	19	35	26	7	1	0	0	0	0	0	0	0
151223	448.	.11	.23	-.0	0.00	.23	15	203.	0	2	7	19	35	26	6	0	0	0	0	0	0	0	0
151239	454.	.11	.21	-.2	0.00	.19	14	180.	0	2	7	21	38	21	5	0	0	0	0	0	0	0	0
151255	462.	.12	.24	-.3	0.00	.24	16	178.	0	1	5	15	24	22	18	8	1	0	0	0	0	0	0
151311	476.	.12	.15	.0	0.00	.17	14	176.	0	2	9	24	38	19	4	0	0	0	0	0	0	0	0
151327	483.	.13	.16	.1	0.00	.19	15	175.	0	2	7	20	37	25	5	0	0	0	0	0	0	0	0
151343	497.	.13	.18	.2	0.00	.22	15	197.	0	2	7	18	32	29	9	1	0	0	0	0	0	0	0
151359	505.	.13	.28	.1	0.00	.28	16	223.	0	1	5	15	31	31	11	1	0	0	0	0	0	0	0
151415	517.	.13	.26	-.1	0.00	.33	15	259.	0	1	5	15	32	30	11	1	0	0	0	0	0	0	0
151431	536.	.18	.17	-.3	0.00	.32	16	229.	0	1	5	13	28	31	15	2	0	0	0	0	0	0	0
151447	545.	.18	.26	-.4	0.00	.34	16	242.	0	1	5	12	28	34	14	2	0	0	0	0	0	0	0
1515 3	561.	.18	.21	-.4	0.00	.32	17	220.	0	1	5	12	24	32	19	4	0	0	0	0	0	0	0
151519	576.	.17	.19	-.2	0.00	.30	17	202.	0	1	4	11	24	31	19	5	0	0	0	0	0	0	0
151535	585.	.17	.34	-.2	0.00	.28	16	199.	0	1	5	12	27	32	15	3	0	0	0	0	0	0	0
151551	606.	.18	.15	-.1	0.00	.29	16	207.	0	1	5	12	27	32	15	3	0	0	0	0	0	0	0
1516 7	615.	.18	.27	-.2	0.00	.28	16	215.	0	1	5	15	30	30	11	2	0	0	0	0	0	0	0
151623	630.	.17	.21	-.2	0.00	.25	15	206.	0	1	6	16	32	29	9	1	0	0	0	0	0	0	0
151639	643.	.15	.18	-.3	0.00	.25	16	205.	0	1	6	15	30	29	12	2	0	0	0	0	0	0	0
151655	649.	.15	.26	-.5	0.00	.25	16	182.	0	1	5	13	26	32	15	3	0	0	0	0	0	0	0
151711	666.	.14	.22	-.8	0.00	.28	17	176.	0	1	4	10	24	31	19	5	1	0	0	0	0	0	0
151727	671.	.15	.30	-.8	0.00	.29	17	190.	0	1	4	12	21	23	21	10	1	0	0	0	0	0	0
151743	695.	.18	.14	-.7	0.00	.27	17	184.	0	1	4	12	24	32	18	3	0	0	0	0	0	0	0
151759	701.	.17	.28	-.7	0.00	.27	17	175.	0	1	4	10	22	34	18	3	0	0	0	0	0	0	0
151815	714.	.15	.24	-.8	0.00	.26	17	163.	0	1	4	10	22	33	19	4	1	0	0	0	0	0	0
151831	728.	.15	.12	-.7	0.00	.22	15	175.	0	1	6	16	33	29	9	1	0	0	0	0	0	0	0
151847	733.	.15	.32	-.5	0.00	.22	15	189.	0	1	6	17	36	26	7	1	0	0	0	0	0	0	0
1519 3	751.	.14	.17	-.5	0.00	.22	15	193.	0	1	6	19	37	24	6	0	0	0	0	0	0	0	0
151919	759.	.15	.16	-.5	0.00	.22	15	183.	0	1	6	16	35	28	7	1	0	0	0	0	0	0	0
151935	771.	.16	.23	-.5	0.00	.22	15	172.	0	1	5	14	34	31	8	1	0	0	0	0	0	0	0
151951	781.	.14	.22	-.5	0.00	.21	17	136.	0	1	4	10	24	29	18	8	3	0	0	0	0	0	0
1520 7	794.	.17	.24	-.5	0.00	.28	21	98.	0	0	1	3	6	15	31	28	6	0	0	0	0	0	1
152023	819.	.29	.27	-.5	0.00	.31	21	112.	0	0	1	4	7	16	34	26	3	0	0	0	0	0	1
152039	839.	.24	.16	-.6	0.00	.24	20	97.	0	0	2	5	9	17	26	23	8	1	0	0	0	0	0
152055	841.	.24	.29	-.5	0.00	.23	21	87.	0	0	2	4	8	16	27	27	8	1	0	0	0	0	0
152111	854.	.14	.19	-.4	0.00	.20	21	76.	0	0	2	4	7	16	30	27	6	0	0	0	0	0	0
152127	858.	.12	.18	-.3	0.00	.18	20	72.	0	0	2	4	8	18	30	25	6	1	0	0	0	0	0
152143	858.	.12	.32	-.1	0.00	.14	19	69.	0	1	3	6	13	26	30	13	2	0	0	0	0	0	1
152159	868.	.09	.23	-.1	0.00	.19	20	84.	0	0	2	5	10	24	34	18	2	0	0	0	0	0	0
152215	875.	.08	.20	-.2	0.00	.22	21	81.	0	0	2	4	7	14	25	28	12	1	0	0	0	0	0
152231	883.	.11	.34	-.3	0.00	.20	22	74.	0	0	2	5	12	14	16	22	17	5	1	0	0	0	0

DATE: 3/12/80 NATURAL ICING ENCOUNTER FLIGHT 21 TAPE RECORD # 501

TIME (LST)	IRU (CNTS)	MR 10 (G/M3)	MR 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
152247	892.	.13	.12	-.3	0.00	.17	22	67.	0	0	2	6	12	13	14	18	18	9	1	0	0	0	0
1523 3	895.	.13	.31	-.5	0.00	.27	22	85.	0	0	1	3	5	11	26	36	10	1	0	0	0	0	0
152319	913.	.14	.14	-.5	0.00	.25	21	85.	0	0	1	3	6	13	30	32	7	1	0	0	0	0	0
152335	922.	.18	.32	-.6	0.00	.24	21	88.	0	0	2	4	7	15	26	26	9	1	1	0	1	1	1
152351	929.	.20	.15	-.6	0.00	.21	21	76.	0	0	2	4	7	15	26	29	11	1	0	0	0	0	0
1524 7	929.	.19	.34	-.5	0.00	.21	21	82.	0	0	2	4	7	16	30	27	6	0	0	0	0	0	1
152423	943.	.11	.15	-.5	0.00	.18	20	80.	0	0	2	5	10	23	33	17	2	0	0	0	0	0	0
152439	943.	.11	.30	-.4	0.00	.13	17	79.	0	1	4	8	19	35	21	4	1	0	0	0	0	0	1
152455	950.	.11	.13	-.3	0.00	.06	15	71.	0	4	11	15	27	26	11	2	0	0	0	0	0	0	0
152511	378.	.11	.06	-.4	0.00	.02	9	47.	0	16	52	17	1	1	1	1	0	3	0	5	0	0	0
152527	0.	.11	.08	-.1	0.00	.01	39	0.	0	0	0	1	1	3	5	3	0	7	0	13	16	20	25
152543	0.	.11	.11	.1	0.00	.00	28	0.	0	1	2	4	5	4	15	0	15	21	29	0	0	0	0
152559	0.	.11	.16	.3	0.00	.03	12	53.	0	8	24	20	12	8	3	1	2	3	4	2	0	4	5
152615	0.	.11	.17	.3	0.00	.08	16	74.	0	2	8	15	22	25	15	4	1	0	0	0	0	1	0
152631	0.	.11	.36	.1	0.00	.13	21	54.	0	0	2	5	9	17	23	21	10	3	0	0	0	0	1
152647	13.	.06	.13	-.2	0.00	.16	22	59.	0	0	2	4	7	13	20	23	16	4	0	0	0	0	1
1527 3	22.	.04	.18	-.3	0.00	.17	22	68.	0	0	2	5	7	13	23	26	13	2	0	0	0	0	1
152719	22.	.04	.35	-.5	0.00	.14	20	71.	0	1	3	8	12	16	20	21	12	2	0	0	0	0	0
152735	34.	.07	.22	-.4	0.00	.11	17	73.	0	1	4	11	22	24	17	7	2	0	1	0	1	1	1
152751	39.	.10	.10	-.4	0.00	.07	15	77.	0	4	11	17	27	19	7	2	0	1	1	1	1	1	2
1528 7	92.	.41	.13	-.3	0.00	.04	11	73.	0	9	31	26	5	2	1	1	1	1	3	2	2	6	4
152823	97.	.41	.16	-.3	0.00	.08	15	90.	0	3	12	19	23	20	9	2	0	0	1	0	1	1	1
152839	97.	.41	.23	-.2	0.00	.13	15	112.	0	2	6	17	33	23	9	3	0	0	0	0	0	0	1
152855	98.	.33	.38	-.4	0.00	.17	17	118.	0	1	4	11	26	31	14	4	1	0	0	0	0	0	0
152911	109.	.04	.10	-.6	0.00	.18	17	121.	0	1	4	11	24	29	14	5	2	1	0	0	0	1	0
152927	109.	.04	.27	-.7	0.00	.17	17	111.	0	1	4	10	23	28	17	6	2	1	0	0	0	0	0
152943	117.	.07	.24	-1.0	0.00	.13	16	105.	0	1	5	14	32	30	8	1	0	0	0	0	0	0	1
152959	129.	.09	.17	-.6	0.00	.15	16	107.	0	1	4	11	28	37	9	2	0	0	0	0	0	0	1
153015	130.	.10	.35	-.6	0.00	.16	15	131.	0	1	6	15	31	28	9	2	0	0	0	0	0	0	0
153031	149.	.11	.16	-.5	0.00	.19	17	135.	0	1	6	12	18	26	20	8	1	0	0	0	0	0	0
153047	149.	.12	.28	-.7	0.00	.27	19	130.	0	1	3	6	12	26	30	12	2	0	0	0	1	0	1
1531 3	180.	.19	.15	-.7	0.00	.31	18	194.	0	1	4	10	20	26	22	9	2	0	0	0	0	0	0
153119	195.	.21	.20	-.7	0.00	.35	17	219.	0	1	4	10	22	28	21	7	1	0	0	0	0	0	0
153135	211.	.21	.21	-.8	0.00	.35	16	241.	0	1	4	11	29	32	14	3	0	0	0	0	0	0	0
153151	228.	.20	.30	-.9	0.00	.34	15	291.	0	1	6	17	42	24	4	0	0	0	0	0	0	0	0
1532 7	245.	.19	.19	-.9	0.00	.32	15	299.	0	2	7	20	37	23	5	0	0	0	0	0	0	0	0
153223	261.	.36	.26	-1.1	0.00	.39	15	326.	0	1	6	17	38	26	5	1	0	0	0	0	0	0	0
153239	301.	.93	.18	-1.2	0.00	.37	14	344.	0	2	7	22	40	19	4	0	0	0	0	0	0	0	0
153255	318.	.86	.21	-1.3	0.00	.45	16	320.	0	1	5	12	32	36	9	1	0	0	0	0	0	0	0
153311	342.	.26	.22	-1.5	0.00	.45	15	342.	0	1	5	13	41	29	5	1	0	0	0	0	0	0	0
153327	364.	.27	.24	-1.7	0.00	.46	16	319.	0	1	4	11	34	37	7	1	0	0	0	0	0	0	0
153343	390.	.31	.22	-1.7	0.00	.51	16	330.	0	0	4	11	29	33	14	4	1	0	0	0	0	0	0
153359	412.	.31	.17	-1.7	0.00	.44	15	323.	0	1	5	16	32	21	13	6	1	0	0	0	0	0	0
153415	432.	.27	.22	-2.0	0.00	.45	17	294.	0	1	5	14	22	25	20	7	1	0	0	0	0	0	0
153431	448.	.25	.29	-1.9	0.00	.35	15	292.	0	1	7	20	31	25	10	2	0	0	0	0	0	0	0
153447	468.	.19	.14	-1.7	0.00	.28	14	312.	0	2	11	29	34	16	4	0	0	0	0	0	0	0	0
1535 3	471.	.19	.34	-1.7	0.00	.29	13	364.	0	3	15	32	27	15	4	0	0	0	0	0	0	0	0
153519	494.	.16	.11	-1.8	0.00	.20	11	353.	0	5	25	45	17	3	2	0	0	0	0	0	0	0	0
153535	494.	.16	.31	-1.8	0.00	.33	13	396.	0	2	12	35	35	9	3	0	0	0	0	0	0	0	0
153551	517.	.15	.12	-1.8	0.00	.29	12	381.	0	2	15	38	31	7	3	0	0	0	0	0	0	0	0

DATE: 3/12/80 NATURAL ICING ENCOUNTER FLIGHT 21 TAPE RECORD # 351

TIME (LST)	IRU (CNTS)	MR 10 (G/M3)	MR 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
1536 7	524.	.16	.31	-1.9	0.00	.25	12	377.	0	3	20	39	25	6	3	0	0	0	0	0	0	0	0
153623	539.	.16	.12	-1.8	0.00	.21	11	359.	0	4	25	44	19	3	2	0	0	0	0	0	0	0	0
153639	539.	.16	.32	-1.8	0.00	.17	11	331.	0	6	31	43	13	2	2	0	0	0	0	0	0	0	0
153655	552.	.10	.28	-1.7	0.00	.16	11	324.	0	7	33	41	12	2	2	0	0	0	0	0	0	0	0
153711	557.	.09	.16	-1.7	0.00	.21	11	340.	0	4	24	42	19	3	2	0	0	0	0	0	0	0	0
153727	560.	.10	.37	-1.7	0.00	.19	12	299.	0	4	20	41	25	5	2	0	0	0	0	0	0	0	0
153743	583.	.12	.11	-1.7	0.00	.18	12	284.	0	4	20	42	24	4	2	0	0	0	0	0	0	0	0
153759	582.	.12	.23	-1.9	0.00	.19	11	363.	0	5	30	44	13	2	2	0	0	0	0	0	0	0	0
153815	594.	.11	.28	-1.9	0.00	.21	11	352.	0	4	24	46	17	3	2	0	0	0	0	0	0	0	0
153831	604.	.11	.20	-1.8	0.00	.23	12	332.	0	3	19	43	25	4	2	0	0	0	0	0	0	0	0
153847	616.	.13	.24	-1.8	0.00	.21	12	323.	0	3	22	43	22	4	2	0	0	0	0	0	0	0	0
1539 3	628.	.14	.20	-1.8	0.00	.18	11	328.	0	5	29	44	15	3	2	0	0	0	0	0	0	0	0
153919	628.	.14	.34	-1.8	0.00	.12	10	269.	0	8	36	36	10	2	1	0	0	0	0	0	0	1	1
153935	644.	.09	.42	-1.8	0.00	.09	11	197.	0	10	32	29	15	4	1	0	0	0	0	0	1	1	0
153951	646.	.09	.04	-1.7	0.00	.08	12	138.	0	7	25	32	18	4	1	0	1	0	1	1	1	1	1
1540 7	646.	.09	.07	-1.7	0.00	.04	11	87.	0	11	30	29	11	3	1	1	1	1	1	2	0	3	0
154023	646.	.09	.09	-1.8	0.00	.02	18	35.	0	16	13	12	6	2	2	2	3	5	7	4	5	7	9
154039	646.	.09	.09	-1.8	0.00	.00	19	0.	0	4	4	7	7	25	20	30	0	0	0	0	0	0	0
154055	646.	.09	.08	-1.8	0.00	.00	34	0.	0	0	0	1	3	3	4	7	10	0	19	0	0	0	48
154111	646.	.09	.08	-1.8	0.00	.01	34	0.	0	0	1	1	2	3	5	7	10	7	9	12	16	20	0
154127	646.	.09	.10	-1.9	0.00	.01	36	1.	0	0	0	1	2	2	5	5	4	5	15	9	12	15	19
154143	646.	.09	.08	-1.9	0.00	.01	41	0.	0	0	0	0	2	3	3	4	6	9	12	0	0	25	30
154159	646.	.09	.07	-1.9	0.00	.00	32	0.	0	0	0	2	2	5	7	5	8	11	15	0	0	0	39
154215	645.	.08	.07	-1.9	0.00	.01	29	16.	0	15	8	4	2	4	4	4	3	4	6	0	10	13	16
154231	646.	.00	.09	-2.0	0.00	.02	10	57.	0	31	19	8	4	1	1	1	2	2	3	0	6	7	9
154247	646.	.00	.08	-2.0	0.00	.01	34	6.	0	6	4	3	2	3	3	5	3	5	13	8	11	13	16
1543 3	645.	.00	.08	-2.0	0.00	.01	37	1.	0	0	1	1	2	5	4	3	8	5	7	10	13	16	20
154319	645.	.00	.07	-1.9	0.00	.01	32	3.	0	2	1	1	2	4	5	8	11	5	14	9	0	14	18
154335	646.	.00	.07	-1.6	0.00	.01	34	1.	0	0	0	1	1	4	4	4	10	9	12	8	10	13	16
154351	645.	.00	.07	-1.4	0.00	.02	39	2.	0	0	0	0	1	1	2	4	4	6	8	10	13	16	30
1544 7	645.	.00	.07	-1.2	0.00	.01	38	0.	0	0	0	1	0	2	3	2	3	5	14	9	23	14	18
154423	645.	.00	.06	-1.0	0.00	.00	18	0.	0	1	6	7	15	26	41	0	0	0	0	0	0	0	0
154439	645.	.00	.06	-.7	0.00	.00	17	0.	0	4	8	19	0	66	0	0	0	0	0	0	0	0	0
154455	645.	.00	.09	-.8	0.00	.07	9	229.	0	19	46	22	2	0	0	0	0	0	0	1	0	1	2
154511	645.	.00	.16	-.7	0.00	.03	8	162.	0	40	37	9	1	0	0	0	0	1	0	0	2	0	4
154527	645.	.00	.17	-.3	0.00	.01	10	33.	0	36	13	1	0	1	1	2	3	0	6	0	0	13	16
154543	645.	.00	.17	-.1	0.00	.01	9	30.	0	45	7	0	0	1	2	3	4	0	8	11	14	0	0
154559	646.	.00	.18	.2	0.00	.01	39	9.	0	14	2	0	0	1	2	3	5	0	9	0	15	19	24
154615	645.	.00	.19	.5	0.00	.01	6	63.	0	61	14	1	0	0	0	2	0	0	5	0	0	0	14
154631	645.	.00	.18	.9	0.00	.00	26	0.	0	0	0	3	3	5	18	13	19	0	35	0	0	0	0
154647	645.	.00	.18	1.2	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
1547 3	645.	.00	.17	1.5	0.00	.00	6	0.	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
154719	645.	.00	.17	1.5	0.00	.00	8	0.	0	37	62	0	0	0	0	0	0	0	0	0	0	0	0
154735	644.	.00	.18	1.5	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NATURAL ICING ENCOUNTER FLIGHT 21
AIRCRAFT STATE PARAMETERS (JUN=)H 318)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
14 247	14.1	876.	.26	63.0	11.6
14 3 3	14.0	876.	.26	63.3	4.0
14 319	14.0	876.	.26	62.7	7.6
14 335	14.1	876.	.26	63.4	8.3
14 351	14.2	876.	.26	64.3	7.3
14 4 7	13.7	876.	.27	63.0	7.4
14 423	13.5	876.	.27	63.0	8.0
14 439	13.3	876.	.27	63.0	9.0
14 455	14.1	876.	.27	62.9	7.7
14 511	14.2	876.	.27	63.3	7.5
14 527	14.1	876.	.26	63.1	7.0
14 543	11.5	878.	.27	55.0	7.7
14 559	10.2	880.	.27	51.4	10.2
14 615	10.4	880.	.27	51.1	12.7
14 631	10.5	878.	.27	50.7	11.3
14 647	10.4	880.	.27	50.6	9.0
14 7 3	10.4	880.	.27	50.7	8.6
14 719	10.5	880.	.27	51.0	8.4
14 735	10.4	882.	.27	51.4	9.6
14 751	10.4	880.	.27	51.1	9.0
14 8 7	10.4	882.	.27	50.8	8.8
14 823	10.4	882.	.27	51.0	9.7
14 839	10.4	882.	.27	52.0	9.2
14 855	10.4	882.	.27	51.1	9.9
14 911	10.4	882.	.27	51.5	9.3
14 927	10.2	882.	.27	50.3	11.3
14 943	10.4	884.	.27	50.8	10.0
14 959	10.5	884.	.27	50.6	9.5
141015	9.5	884.	.27	49.3	10.6
141031	8.9	884.	.27	48.1	12.6
141047	10.4	884.	.27	50.8	13.7
1411 3	10.5	884.	.27	51.5	9.0
141119	10.4	884.	.27	51.0	9.4
141135	10.4	884.	.27	52.1	8.3
141151	10.4	884.	.27	52.1	10.3
1412 7	10.4	886.	.27	52.1	8.0
141223	9.7	884.	.27	49.6	8.7
141239	10.3	884.	.27	50.6	8.6
141255	10.3	884.	.27	50.7	9.2
141311	10.3	886.	.27	50.8	9.0
141327	10.4	884.	.27	51.1	8.0
141343	10.4	884.	.27	51.2	6.1
141359	10.4	884.	.27	51.3	7.9
141415	10.3	884.	.27	51.1	7.6
141431	10.3	884.	.27	51.2	7.4
141447	10.3	886.	.27	50.6	8.4
1415 3	10.4	884.	.27	51.3	6.7
141519	10.4	884.	.27	50.8	10.1
141535	10.4	884.	.27	51.3	8.5
141551	10.4	884.	.27	51.3	9.1

NATURAL ICING ENCOUNTER FLIGHT 21
AIRCRAFT STATE PARAMETERS (JUN-IM 31A)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
1416 7	10.4	8Mo.	.27	51.9	9.1
141623	10.4	8Mo.	.27	51.2	8.1
141639	10.4	8Mo.	.27	51.8	7.9
141655	10.4	8Mo.	.27	51.5	9.1
141711	10.3	8Mo.	.27	51.7	9.7
141727	10.3	8Mo.	.27	51.3	9.6
141743	10.3	8Mo.	.27	50.6	12.2
141759	10.3	8Mo.	.27	51.6	9.8
141815	10.3	8Mo.	.27	50.7	8.3
141831	10.3	8Mo.	.27	51.1	8.0
141847	9.8	8Mo.	.27	50.2	7.9
1419 3	10.3	8Mo.	.27	51.2	10.4
141919	10.1	8Mo.	.27	51.2	8.6
141935	9.1	8Mo.	.27	49.3	9.7
141951	9.7	8Mo.	.27	50.0	11.1
1420 7	13.6	8Mo.	.24	61.1	10.5
142023	14.1	8Mo.	.43	63.6	8.9
142039	18.5	862.	3.10	72.0	5.7
142055	34.6	829.	6.10	93.7	6.5
142111	34.7	848.	6.11	92.1	4.4
142127	33.7	878.	5.79	89.5	5.5
142143	31.3	832.	5.62	86.8	8.4
142159	31.9	862.	5.76	88.5	5.4
142215	20.4	8oo.	2.22	68.8	7.0
142231	15.7	890.	.26	63.0	8.1
142247	13.9	890.	.27	63.1	8.7
1423 3	13.8	890.	.27	63.0	8.8
142319	13.8	890.	.27	62.8	8.3
142335	13.7	890.	.27	62.0	8.3
142351	13.9	890.	.28	63.6	8.1
1424 7	27.9	841.	5.25	86.1	6.6
142423	40.6	884.	6.75	100.5	44.7
142439	41.2	1037.	6.88	100.9	37.1
142455	40.7	1271.	6.83	98.9	33.4
142511	39.5	1514.	6.83	98.5	74.2
142527	40.5	1709.	6.82	97.9	74.7
142543	40.3	1906.	6.82	98.2	72.5
142559	40.1	2127.	6.83	97.7	70.9
142615	40.0	2319.	6.82	97.2	72.5
142631	40.1	2541.	6.88	97.0	72.4
142647	40.2	2784.	6.90	96.7	72.8
1427 3	39.6	3047.	6.93	95.5	69.4
142719	37.2	3220.	6.88	92.2	81.3
142735	32.8	3174.	6.06	86.7	95.1
142751	34.9	3174.	6.39	89.9	88.7
1428 7	36.5	3212.	6.55	91.5	90.4
142823	36.7	3220.	6.54	91.3	92.1
142839	36.7	3251.	6.54	90.4	91.0
142855	37.0	3260.	6.54	92.1	92.3
142911	37.1	3240.	6.54	92.3	95.6

NATURAL ICING ENCOUNTER FLIGHT 21
AIRCRAFT STATE PARAMETERS (JUH-1H 31A)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
142927	37.0	3243.	6.54	92.2	95.9
142943	36.7	3245.	6.54	90.9	93.5
142959	36.7	3284.	6.55	91.6	90.5
143015	36.7	3262.	6.53	90.6	95.6
143031	36.3	3232.	6.45	89.8	97.1
143047	36.6	3223.	6.45	91.8	99.0
1431 3	36.5	3223.	6.45	91.6	97.7
143119	36.2	3227.	6.45	91.2	93.1
143135	36.4	3254.	6.45	91.3	93.0
143151	36.2	3304.	6.45	90.9	87.1
1432 7	36.1	3353.	6.45	90.9	90.8
143223	36.3	3333.	6.45	90.4	96.8
143239	36.1	3309.	6.45	90.9	94.7
143255	36.6	3247.	6.45	91.7	98.9
143311	36.4	3238.	6.45	87.6	99.7
143327	36.1	3194.	6.46	83.9	99.3
143343	38.8	3117.	6.68	94.3	103.1
143359	39.9	3159.	6.81	96.0	97.1
143415	39.7	3243.	6.81	95.7	96.5
143431	39.5	3302.	6.81	92.4	96.8
143447	39.6	3349.	6.81	95.1	97.2
1435 3	39.4	3391.	6.81	93.9	97.6
143519	39.6	3404.	6.82	95.0	98.5
143535	40.1	3351.	6.81	95.2	103.8
143551	40.4	3276.	6.82	96.5	107.5
1436 7	40.4	3220.	6.82	98.1	107.8
143623	40.1	3205.	6.82	97.7	102.6
143639	41.2	3273.	7.03	98.3	95.1
143655	41.0	3460.	7.04	98.6	88.1
143711	40.7	3614.	7.03	97.9	87.3
143727	42.3	3758.	7.27	98.3	87.4
143743	43.6	3959.	7.42	100.3	89.4
143759	43.3	4119.	7.45	101.6	95.7
143815	45.5	4254.	7.73	105.3	96.2
143831	46.0	4483.	7.86	105.0	87.9
143847	45.0	4732.	7.83	103.3	81.4
1439 3	46.3	4932.	7.97	104.9	83.1
143919	47.5	5233.	8.15	105.7	75.8
143935	46.9	5576.	8.16	104.4	73.3
143951	46.1	5909.	8.16	101.7	70.8
1440 7	46.0	6137.	8.15	101.1	78.9
144023	45.9	6334.	8.14	101.0	82.9
144039	45.8	6506.	8.14	100.6	86.5
144055	42.7	6610.	7.75	92.3	96.4
144111	37.7	6546.	7.05	90.5	104.3
144127	38.1	6424.	7.07	91.2	107.8
144143	38.5	6292.	7.12	92.2	107.2
144159	38.4	6260.	7.23	91.8	97.4
144215	38.2	6297.	7.22	91.3	90.6
144231	38.3	6292.	7.23	91.1	93.9

NATURAL ICING ENCOUNTER FLIGHT 21
AIRCRAFT STATE PARAMETERS (JUNE 1F 31R)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
144247	38.5	6255.	7.23	91.8	97.4
1443 3	38.6	6223.	7.22	92.0	97.4
144319	38.4	6213.	7.23	92.1	97.0
144335	38.4	6171.	7.22	92.5	97.7
144351	38.1	6181.	7.22	91.8	90.3
1444 7	37.5	6302.	7.22	91.0	81.0
144423	37.3	6381.	7.22	90.9	83.3
144439	37.7	6379.	7.22	91.3	92.1
144455	37.8	6339.	7.23	92.2	97.5
144511	38.0	6297.	7.23	92.6	100.1
144527	38.1	6228.	7.22	92.8	101.7
144543	37.7	6213.	7.23	91.4	97.2
144559	37.3	6245.	7.23	89.4	92.6
144615	37.7	6235.	7.23	92.7	95.5
144631	37.8	6174.	7.23	93.0	97.6
144647	37.8	6164.	7.23	92.9	94.6
1447 3	37.7	6201.	7.22	92.7	90.4
144719	37.3	6253.	7.22	91.5	87.1
144735	37.5	6253.	7.25	91.1	90.1
144751	38.8	6250.	7.39	93.3	92.4
1448 7	38.9	6250.	7.40	93.3	95.5
144823	38.9	6272.	7.40	93.4	94.6
144839	38.3	6346.	7.40	92.9	88.3
144855	38.5	6424.	7.40	92.9	95.4
144911	38.9	6364.	7.40	94.6	101.8
144927	39.0	6297.	7.40	94.9	103.0
144943	39.0	6246.	7.40	94.9	99.8
144959	36.4	6300.	7.40	93.9	91.5
145015	38.0	6411.	7.40	92.5	86.7
145031	37.9	6466.	7.40	92.0	90.7
145047	38.3	6426.	7.40	92.7	97.5
1451 3	38.5	6339.	7.32	93.4	103.0
145119	36.1	6292.	7.06	90.1	99.0
145135	36.1	6366.	7.19	90.7	87.0
145151	36.7	6443.	7.27	91.1	84.6
1452 7	36.5	6446.	7.22	90.9	90.9
145223	35.7	6401.	7.08	90.3	94.8
145239	35.6	6371.	7.09	90.6	94.2
145255	35.8	6337.	7.11	91.0	96.1
145311	36.0	6272.	7.09	91.0	97.4
145327	36.6	6215.	7.15	91.8	97.3
145343	36.3	6225.	7.16	91.5	93.3
145359	36.0	6277.	7.16	91.0	90.7
145415	36.2	6277.	7.16	91.7	93.7
145431	36.4	6260.	7.16	92.0	95.4
145447	36.3	6248.	7.16	91.9	95.9
1455 3	36.0	6228.	7.16	90.6	96.6
145519	36.1	6220.	7.16	90.9	96.1
145535	36.2	6181.	7.16	91.0	96.8
145551	36.2	6169.	7.16	91.1	94.8

NATURAL ICING ENCOUNTER FLIGHT 21
AIRCRAFT STATE PARAMETERS (JUN-1M 31M)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
1456 7	36.2	6159.	7.16	90.8	94.3
145623	36.2	6159.	7.16	91.1	93.8
145639	36.0	6156.	7.16	91.5	95.6
145655	38.9	6161.	7.55	94.6	94.0
145711	40.2	6324.	7.78	96.0	83.6
145727	40.4	6426.	7.78	97.3	91.5
145743	40.1	6528.	7.78	93.1	91.8
145759	39.9	6638.	7.76	92.3	92.4
145815	39.9	6733.	7.78	91.7	93.1
145831	39.9	6799.	7.77	90.3	94.9
145847	40.8	6864.	7.86	95.7	93.4
1459 3	42.5	6990.	8.11	98.4	89.9
145919	43.1	7127.	8.11	98.8	90.8
145935	42.6	7283.	8.12	97.9	89.7
145951	43.0	7372.	8.08	99.3	94.4
15 0 7	42.7	7542.	8.18	98.6	84.8
15 023	43.3	7668.	8.24	99.3	89.2
15 039	43.2	7785.	8.22	93.9	91.7
15 055	43.0	7933.	8.24	94.6	86.8
15 111	43.8	8072.	8.25	99.4	90.0
15 127	43.9	8200.	8.23	99.3	89.6
15 143	42.0	8274.	8.00	96.4	91.6
15 159	40.1	8306.	7.75	93.8	93.6
15 215	39.8	8335.	7.78	93.5	89.6
15 231	40.2	8387.	7.82	94.0	88.9
15 247	39.3	8416.	7.57	89.5	91.5
15 3 3	35.4	8414.	7.19	86.3	86.8
15 319	35.4	8385.	7.17	86.8	87.4
15 335	36.0	8350.	7.24	87.6	89.0
15 351	36.9	8308.	7.22	88.8	91.1
15 4 7	37.6	8237.	7.19	89.7	93.0
15 423	37.2	8116.	7.17	87.5	89.9
15 439	38.3	8101.	7.43	91.2	83.5
15 455	37.5	8234.	7.53	90.0	75.2
15 511	37.5	8287.	7.48	90.4	82.7
15 527	38.1	8303.	7.48	91.0	84.9
15 543	39.3	8290.	7.45	92.8	90.7
15 559	36.4	8327.	7.49	88.4	73.2
15 615	36.6	8353.	7.44	89.1	79.4
15 631	37.6	8287.	7.45	90.7	87.1
15 647	39.0	8203.	7.51	92.4	91.1
15 7 3	37.2	8240.	7.54	90.0	82.3
15 719	37.9	8284.	7.58	90.9	85.3
15 735	38.1	8337.	7.65	90.8	83.6
15 751	38.1	8387.	7.63	90.7	84.9
15 8 7	38.7	8393.	7.61	91.6	87.9
15 823	40.3	8311.	7.59	94.3	94.2
15 839	38.3	8311.	7.62	91.2	87.0
15 855	38.2	8372.	7.62	91.2	85.4
15 911	37.2	8424.	7.53	89.8	85.5

NATURAL ICING ENCOUNTER FLIGHT 21
AIRCRAFT STATE PARAMETERS (JUNE 18)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
15 927	36.9	8464.	7.49	89.4	84.3
15 943	34.6	8528.	7.22	86.1	80.3
15 959	34.9	8459.	7.12	86.9	86.8
151015	34.3	8379.	7.07	86.1	86.4
151031	34.1	8332.	7.07	85.6	86.3
151047	34.3	8274.	7.07	86.6	90.7
1511 3	34.5	8216.	7.07	87.2	90.1
151119	33.8	8274.	7.07	85.9	77.8
151135	35.9	8277.	7.31	89.2	82.6
151151	36.9	8284.	7.44	90.4	85.2
1512 7	37.5	8263.	7.44	91.1	89.1
151223	36.9	8277.	7.44	90.3	85.9
151239	38.8	8227.	7.44	92.9	90.5
151255	38.4	8177.	7.46	92.0	86.6
151311	38.3	8213.	7.51	92.2	83.6
151327	38.4	8255.	7.55	92.1	81.3
151343	38.1	8443.	7.63	84.7	74.2
151359	37.7	8546.	7.63	87.4	76.8
151415	39.4	8541.	7.61	93.0	89.0
151431	39.6	8509.	7.59	93.6	91.9
151447	39.0	8530.	7.59	92.6	86.6
1515 3	39.4	8549.	7.58	92.7	86.7
151519	41.1	8438.	7.58	94.9	91.2
151535	39.7	8382.	7.59	92.8	87.7
151551	39.4	8382.	7.59	92.5	89.4
1516 7	40.0	8356.	7.59	93.5	93.9
151623	39.5	8350.	7.59	92.9	90.7
151639	39.6	8353.	7.59	93.4	91.2
151655	39.9	8337.	7.60	93.7	93.1
151711	40.0	8319.	7.60	93.9	94.9
151727	40.2	8298.	7.60	94.2	92.7
151743	40.6	8263.	7.60	95.0	95.0
151759	40.4	8313.	7.63	94.3	86.7
151815	40.9	8361.	7.64	95.1	87.8
151831	41.1	8348.	7.64	95.4	90.6
151847	40.6	8366.	7.64	94.8	90.5
1519 3	40.9	8337.	7.63	95.1	94.9
151919	39.8	8313.	7.55	93.6	94.7
151935	39.5	8306.	7.55	93.2	92.6
151951	39.2	8308.	7.55	92.9	92.5
1520 7	39.4	8292.	7.55	93.4	93.6
152023	40.4	8263.	7.55	95.0	95.1
152039	40.2	8237.	7.55	94.5	94.0
152055	40.1	8234.	7.55	94.4	91.1
152111	40.0	8279.	7.55	93.7	86.3
152127	40.2	8284.	7.55	94.7	89.4
152143	40.9	8166.	7.55	95.5	95.2
152159	40.2	8143.	7.65	94.1	90.1
152215	39.4	8227.	7.66	92.4	83.3
152231	38.8	8366.	7.67	89.0	78.0

NATURAL ICING ENCOUNTER FLIGHT 21
AIRCRAFT STATE PARAMETERS (JUN-1M 31M)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
152247	38.8	8348.	7.67	92.2	84.3
1523 3	39.8	8400.	7.64	93.9	93.7
152319	41.0	8358.	7.62	95.6	92.7
152335	40.2	8327.	7.62	94.3	92.0
152351	39.9	8377.	7.62	93.6	85.6
1524 7	40.8	8393.	7.62	95.3	90.7
152423	40.9	8358.	7.62	95.3	94.4
152439	40.0	8321.	7.62	94.1	95.4
152455	39.3	8283.	7.62	93.3	98.1
152511	39.0	8200.	7.62	86.1	96.1
152527	38.9	8137.	7.62	90.2	96.2
152543	34.7	8080.	7.15	87.1	96.2
152559	32.7	8114.	7.05	76.6	85.2
152615	36.8	8150.	7.56	88.8	82.1
152631	34.8	8311.	8.00	94.0	77.5
152647	39.5	8348.	7.79	93.6	93.9
1527 3	36.3	8269.	7.34	89.5	99.1
152719	35.6	8237.	7.33	87.3	93.1
152735	35.4	8255.	7.34	88.4	89.6
152751	35.3	8250.	7.33	86.0	90.7
1528 7	36.2	8171.	7.33	86.6	96.2
152823	35.3	8213.	7.39	84.7	84.3
152839	38.8	8324.	7.82	93.0	82.6
152855	39.2	8374.	7.83	93.5	89.5
152911	38.4	8353.	7.60	92.0	97.3
152927	37.0	8340.	7.50	90.4	93.1
152943	37.4	8348.	7.50	78.0	91.6
152959	37.2	8353.	7.50	90.2	91.7
153015	37.4	8345.	7.50	90.9	93.0
153031	37.1	8361.	7.50	90.5	91.0
153047	40.2	8332.	7.74	92.7	90.8
1531 3	41.8	8443.	7.98	95.0	86.4
153119	42.2	8581.	7.97	96.4	87.3
153135	42.5	8695.	8.03	96.7	85.3
153151	43.7	8802.	8.11	98.1	85.8
1532 7	44.0	8877.	8.12	98.2	89.5
153223	44.5	8920.	8.12	98.5	92.3
153239	44.6	8944.	8.12	98.4	92.1
153255	44.4	9001.	8.12	98.1	87.3
153311	44.4	9065.	8.12	98.0	90.8
153327	44.6	9106.	8.12	97.6	91.4
153343	44.5	9127.	8.12	97.8	91.5
153359	44.4	9176.	8.12	97.4	86.9
153415	44.9	9214.	8.11	98.1	88.2
153431	44.5	9243.	8.11	94.1	86.7
153447	42.3	9273.	7.80	94.8	85.6
1535 3	39.8	9311.	7.58	91.5	84.7
153519	39.3	9336.	7.58	91.1	85.3
153535	39.4	9358.	7.58	91.1	87.8
153551	39.4	9300.	7.58	91.5	92.2

NATURAL ICING ENCOUNTER FLIGHT 21
AIRCRAFT STATE PARAMETERS (JUNE 18)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
153607	39.1	9273.	7.58	91.0	91.0
153623	38.5	9284.	7.56	90.2	87.1
153639	38.2	9303.	7.56	89.8	86.5
153655	38.3	9287.	7.58	89.9	88.7
153711	37.8	9304.	7.58	88.5	87.5
153727	38.1	9298.	7.58	90.0	90.4
153743	38.3	9257.	7.58	90.2	91.7
153759	38.0	9268.	7.58	87.3	88.5
153815	37.7	9281.	7.58	85.9	87.2
153831	38.3	9230.	7.58	90.5	92.9
153847	37.8	9222.	7.58	89.6	89.1
153903	37.9	9222.	7.60	89.8	89.5
153919	39.0	9238.	7.79	91.3	85.1
153935	39.1	9311.	7.87	90.7	83.3
153951	39.0	9314.	7.87	92.8	92.0
154007	39.5	9290.	7.87	92.8	94.2
154023	39.2	9311.	7.87	91.9	92.3
154039	39.5	9317.	7.86	92.5	94.0
154055	38.7	9355.	7.86	91.4	90.1
154111	38.9	9349.	7.86	91.8	93.7
154127	38.5	9376.	7.87	91.1	90.1
154143	38.8	9385.	7.86	91.7	93.2
154159	38.7	9385.	7.87	91.5	93.4
154215	38.2	9393.	7.86	91.4	93.0
154231	38.5	9442.	7.88	91.0	89.3
154247	38.6	9439.	7.84	91.3	95.6
154303	35.5	9406.	7.40	89.9	95.1
154319	33.9	9412.	7.31	84.9	93.2
154335	33.4	9328.	7.19	84.1	95.4
154351	34.3	9170.	7.19	86.1	101.7
154407	34.0	9006.	7.19	86.2	101.9
154423	33.8	8872.	7.16	85.8	100.0
154439	29.9	8770.	6.67	79.7	97.5
154455	29.8	8637.	6.65	79.7	95.1
154511	29.7	8506.	6.65	79.8	94.9
154527	28.6	8401.	6.65	80.3	93.3
154543	29.3	8258.	6.65	80.9	97.9
154559	27.9	8101.	6.32	77.5	98.6
154615	25.9	7876.	6.00	74.9	101.5
154631	24.6	7656.	5.85	73.9	97.7
154647	23.0	7470.	5.62	72.0	93.7
154703	23.1	7252.	5.62	72.4	95.4
154719	22.7	7006.	5.62	73.2	99.4
154735	20.6	6765.	5.62	73.1	99.3

NATURAL ICING ENCOUNTER

0/ 0/ 0
TAPE # 123
FLIGHT # 25
SAMPLE TIME 834:53

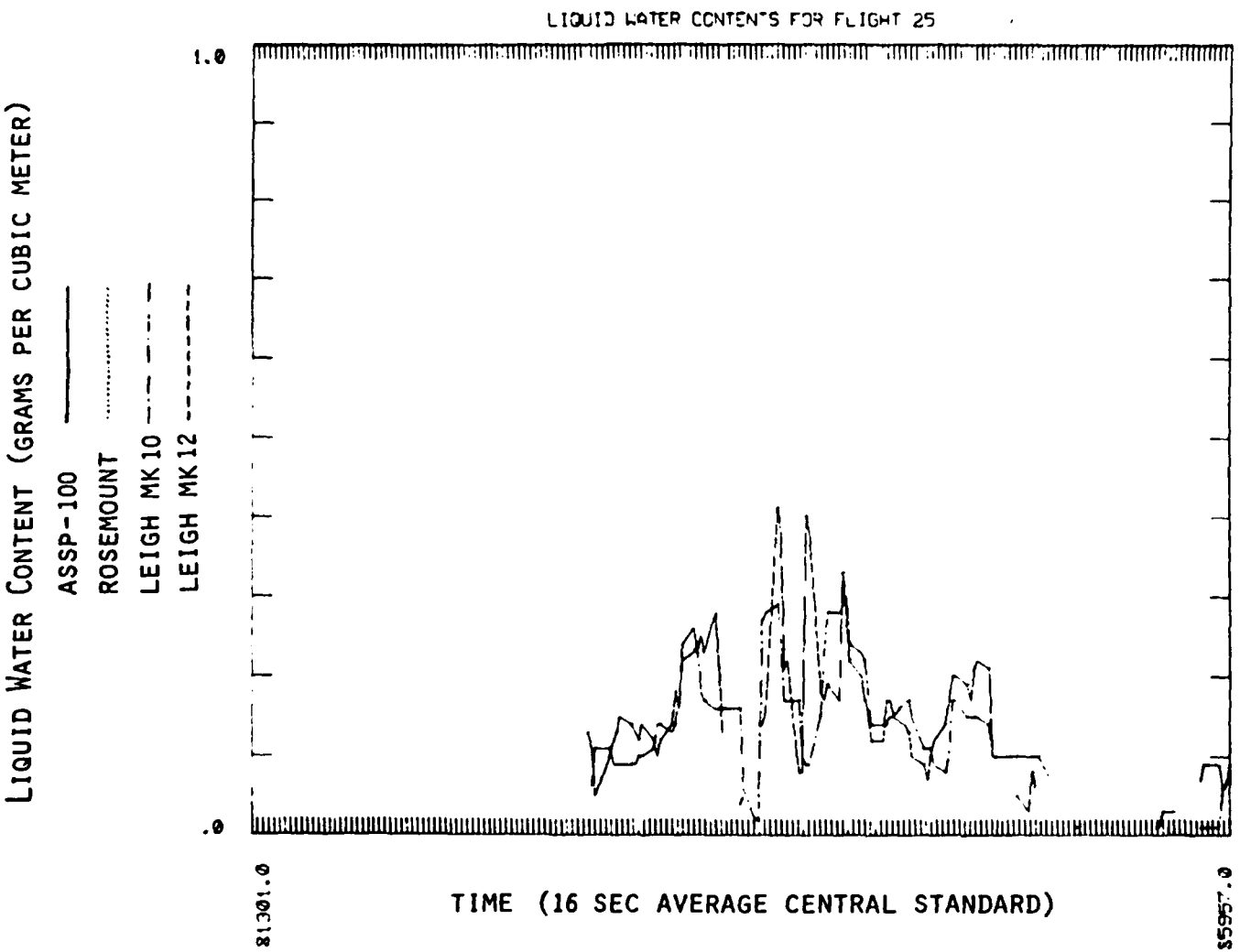
DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.336E+08	.112E+08	.476E-03	.159E-03	0.	0.
6	.547E+08	.182E+08	.618E-02	.206E-02	3.	3.
9	.131E+09	.437E+08	.500E-01	.167E-01	24.	27.
12	.121E+09	.404E+08	.110E+00	.366E-01	53.	81.
15	.187E+08	.625E+07	.331E-01	.110E-01	16.	97.
18	.148E+07	.495E+06	.453E-02	.151E-02	2.	99.
21	.309E+06	.103E+06	.150E-02	.500E-03	1.	100.
24	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
27	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
30	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
33	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
36	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
39	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
42	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
45	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
60	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
80	.357E+04	.178E+03	.956E-03	.478E-04	0.	100.
100	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
120	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
140	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
160	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
180	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

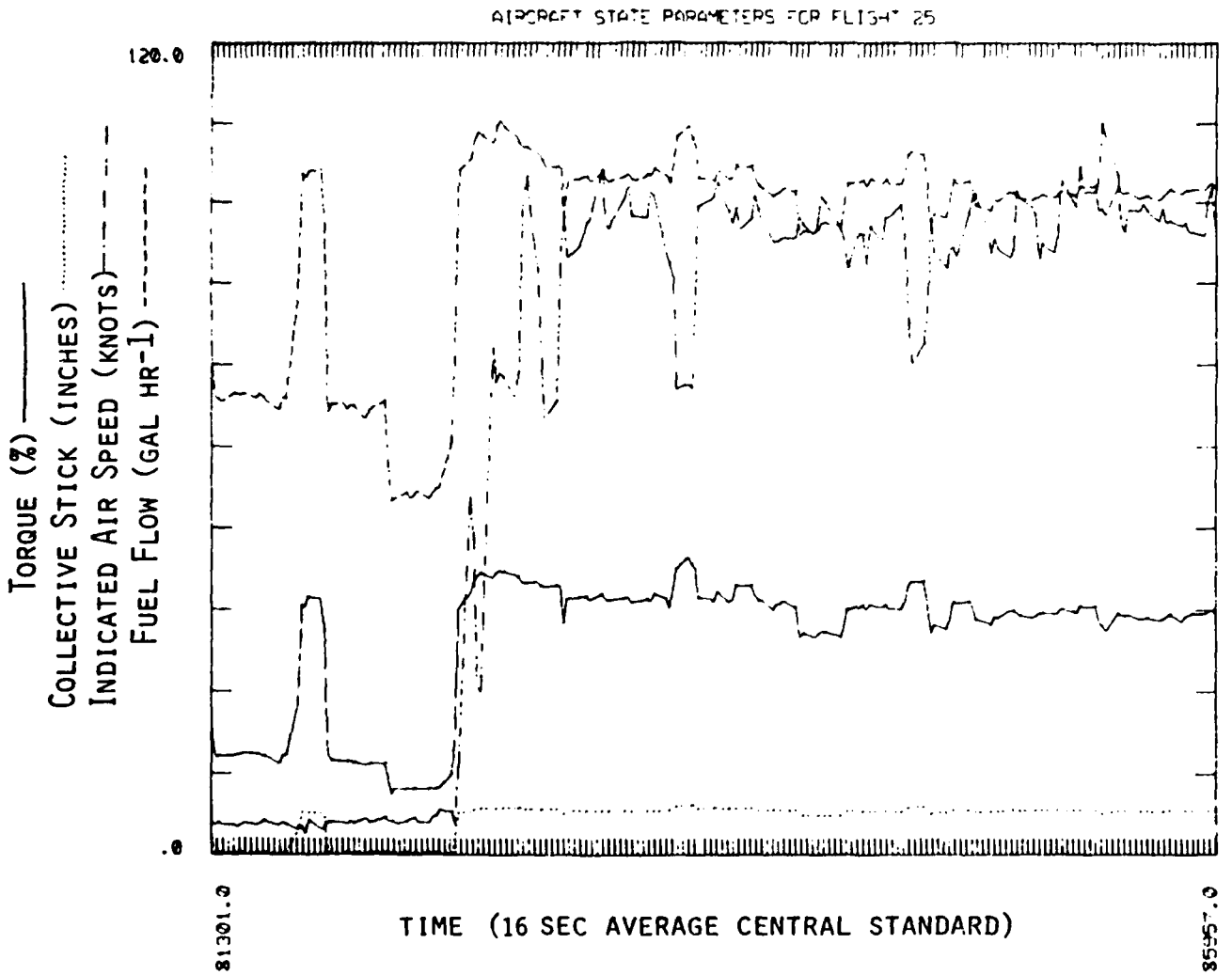
ASP LWC(GM-3)= .205 CPS LWC(GM-3)= .002

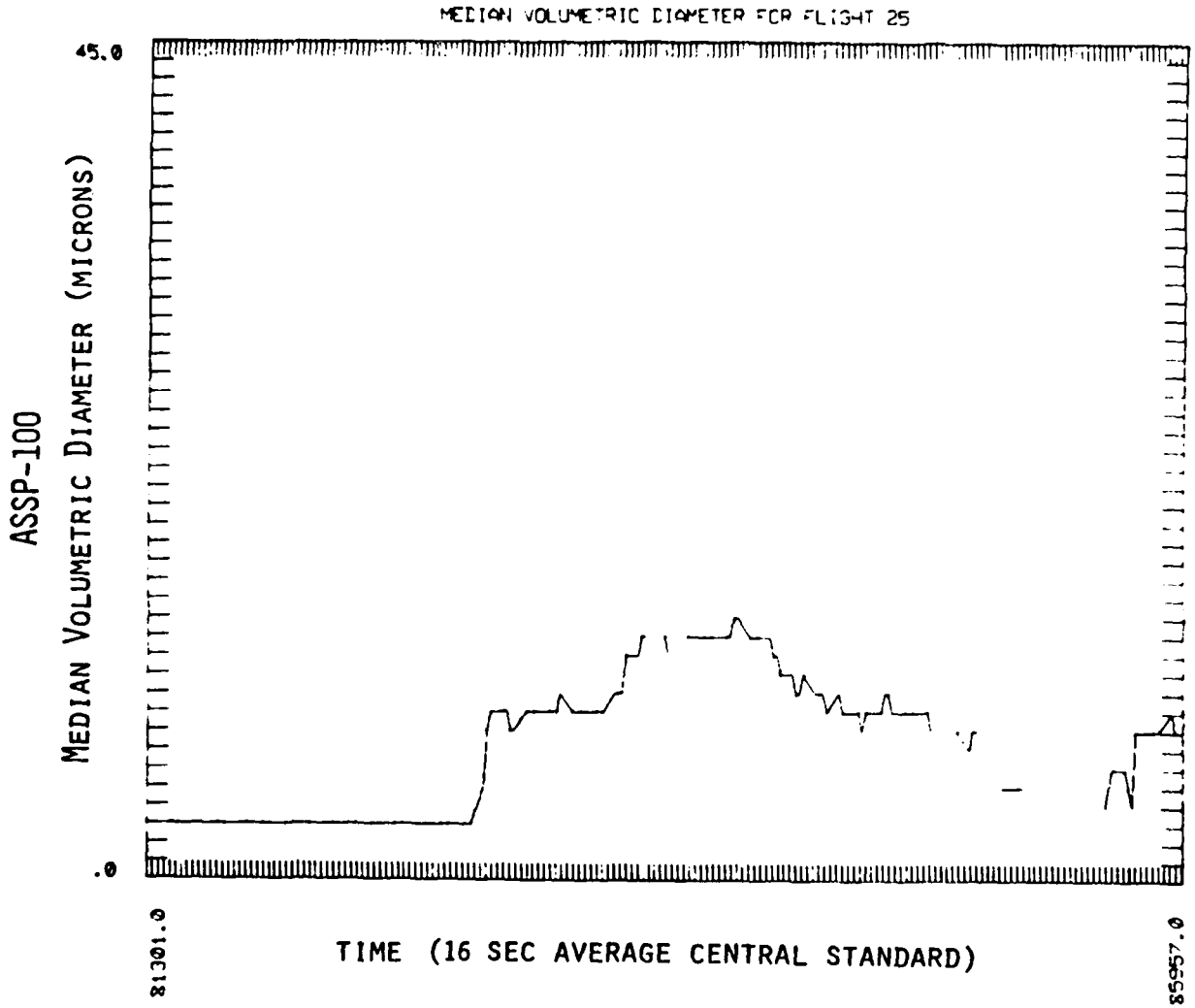
ASP COUNTS(CC-1)= 361. CPS COUNTS(LIT-1)= 0.

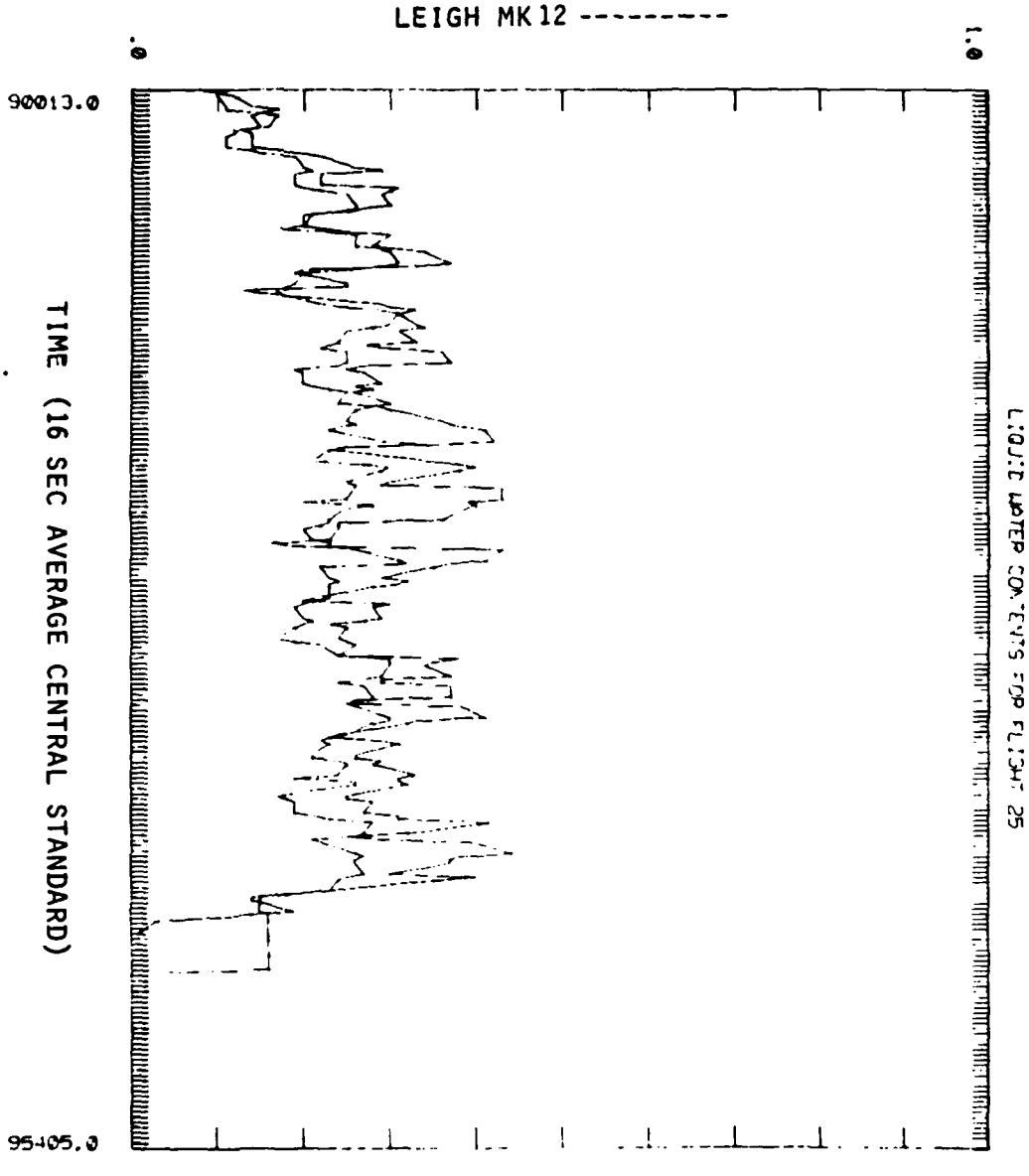
.21 GRAMS PER CUBIC METER @ 12. MICRONS MEDIAN VOLUMETRIC DIAMETER

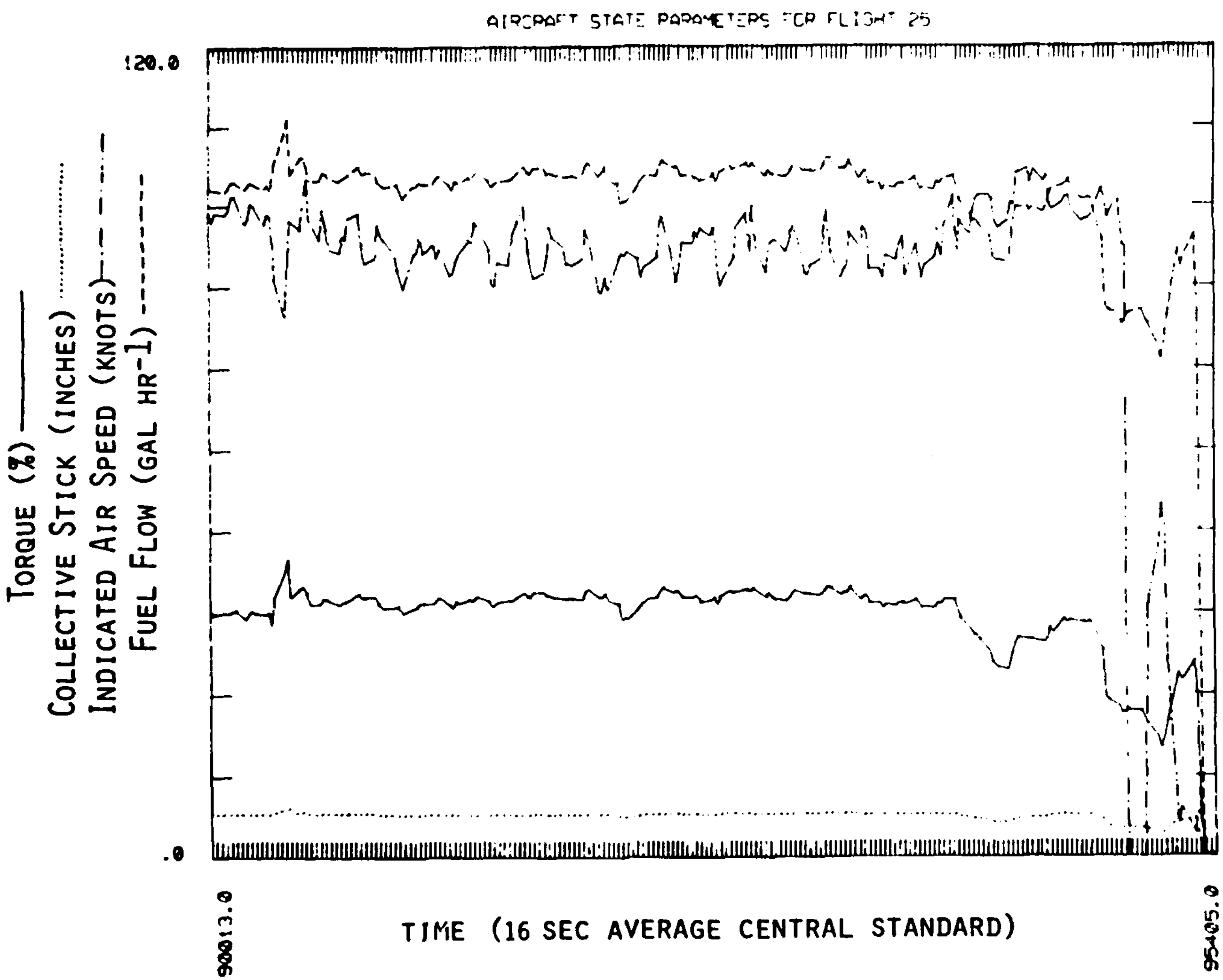
METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE


LIQUID WATER CONTENTS FOR FLIGHT 25
LIQUID WATER CONTENT (GRAMS PER CUBIC METER)
ASSP-100
ROSEMOUNT
LEIGH MK10
LEIGH MK12
1.0
.0
81301.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)
85957.0

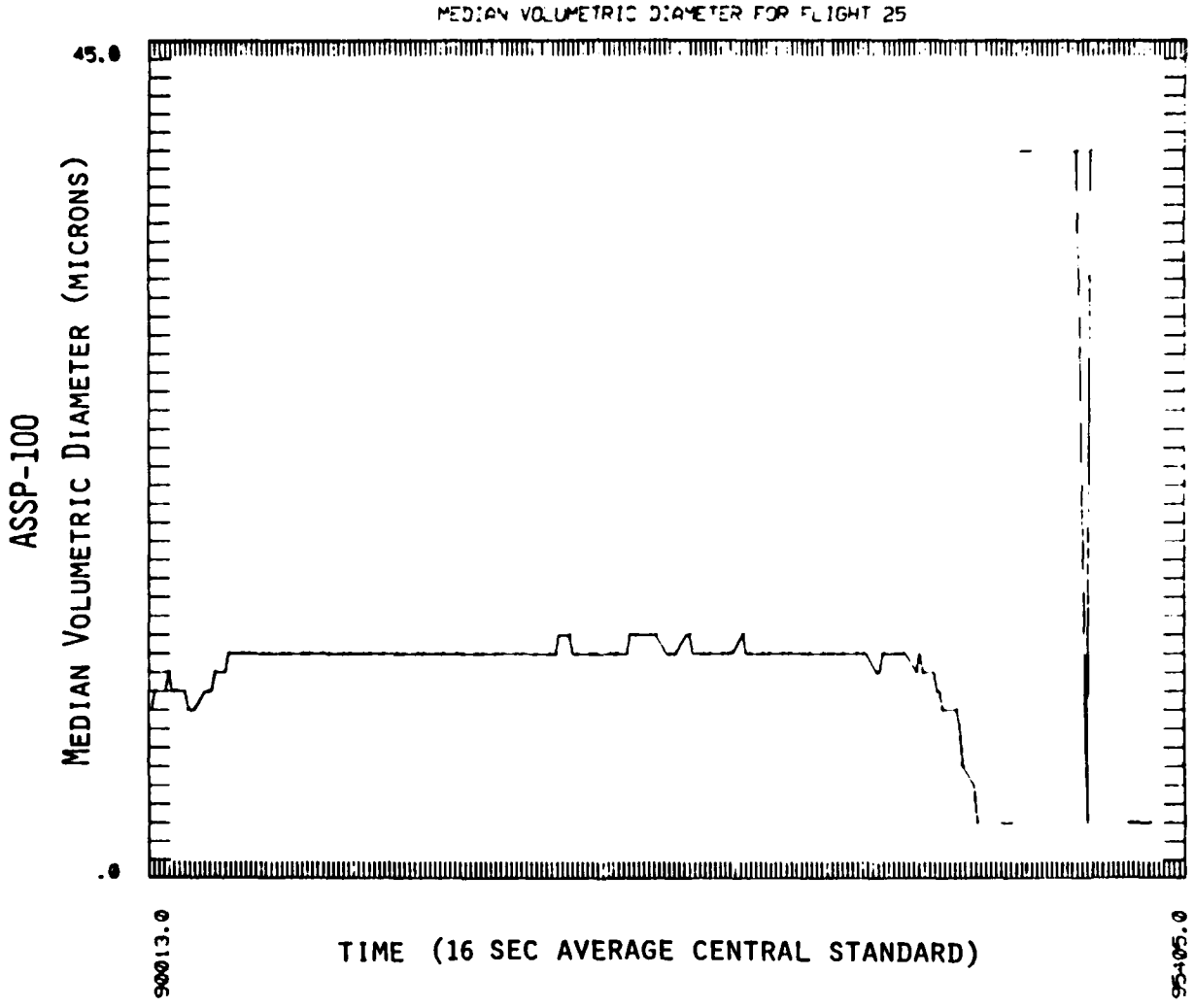

AIRCRAFT STATE PARAMETERS FOR FLIGHT 25
120.0
.0
TORQUE (%)
COLLECTIVE STICK (INCHES)
INDICATED AIR SPEED (KNOTS)
FUEL FLOW (GAL HR-1)
81301.0
85957.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)


MEDIAN VOLUMETRIC DIAMETER FOR FLIGHT 25
45.0
.0
ASSP-100
MEDIAN VOLUMETRIC DIAMETER (MICRONS)
81301.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)
85957.0


LIQUID WATER CONTENT (GRAMS PER CUBIC METER)
ASSP-100
ROSEMOUNT
LEIGH MK 10
LEIGH MK 12
0.
1.0
90013.0
95405.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)
LIQUID WATER CONTENTS FOR FLIGHT 25



AIRCRAFT STATE PARAMETERS FOR FLIGHT 25
120.0
.0
TORQUE (%)
COLLECTIVE STICK (INCHES)
INDICATED AIR SPEED (KNOTS)
FUEL FLOW (GAL HR-1)
90013.0
95405.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)


MEDIAN VOLUMETRIC DIAMETER FOR FLIGHT 25
45.0
.0
ASSP-100
MEDIAN VOLUMETRIC DIAMETER (MICRONS)
90013.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)
95105.0

DATE: 3/20/80 NATURAL ICING ENCOUNTER FLIGHT 25 TAPE RECORD # 1

TIME (LST)	IRU (CNTS)	MR 10 (G/M3)	MR 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
813 1	0.	0.00	0.00	.4	0.00	.00	3	2.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81317	0.	0.00	0.00	.4	0.00	.00	3	2.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81333	82.	.18	0.00	.4	0.00	.00	3	3.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81349	0.	.00	0.00	.4	0.00	.00	3	3.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
814 5	11.	.69	.21	.5	0.00	.00	3	3.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81421	0.	.00	.01	2.9	0.00	.00	3	3.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81437	0.	.00	.01	12.9	0.00	.00	3	3.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81453	0.	.00	.01	24.3	0.00	.00	3	3.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
815 9	0.	.00	.01	44.1	0.00	.00	3	3.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81525	0.	.00	.01	58.4	0.00	.00	3	3.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81541	0.	.00	.01	70.2	0.00	.00	3	4.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81557	0.	.00	.01	72.3	0.00	.00	3	4.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81613	0.	.00	.01	72.2	0.00	.00	3	4.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81629	0.	.00	.01	72.2	0.00	.00	3	4.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81645	0.	.00	.01	72.3	0.00	.00	3	3.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
817 1	0.	.00	.01	72.3	0.00	.00	3	3.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81717	0.	.00	.01	72.3	0.00	.00	3	5.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81733	0.	.00	.01	72.3	0.00	.00	3	5.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81749	0.	.00	.01	72.3	0.00	.00	3	6.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
818 5	0.	.00	.02	72.3	0.00	.00	3	6.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81821	0.	.00	.01	72.3	0.00	.00	3	5.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81837	0.	.00	.01	72.3	0.00	.00	3	5.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81853	0.	.00	.01	72.3	0.00	.00	3	5.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
819 9	0.	.00	.01	72.3	0.00	.00	3	5.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81925	0.	.00	.01	72.3	0.00	.00	3	6.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81941	0.	.00	.01	72.3	0.00	.00	3	6.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81957	0.	.00	.01	72.3	0.00	.00	3	6.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82013	0.	.00	.01	72.3	0.00	.00	3	6.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82029	0.	.00	.01	72.3	0.00	.00	3	7.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82045	0.	.00	.01	72.3	0.00	.00	3	7.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
821 1	0.	.00	.01	72.3	0.00	.00	3	6.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82117	0.	.00	.01	72.3	0.00	.00	3	6.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82133	0.	.00	.01	72.3	0.00	.00	3	6.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82149	0.	.00	.01	72.3	0.00	.00	3	6.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
822 5	0.	.00	.01	72.3	0.00	.00	3	5.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82221	0.	.00	.01	72.3	0.00	.00	3	5.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82237	0.	.00	.01	72.3	0.00	.00	3	6.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82253	0.	.00	.01	72.3	0.00	.00	3	6.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
823 9	0.	.00	.01	72.4	0.00	.00	3	6.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82325	0.	.00	.01	72.3	0.00	.00	3	6.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82341	0.	.00	.01	72.3	0.00	.00	3	6.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82357	0.	.00	.01	72.3	0.00	.00	3	6.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82413	0.	.00	.01	72.3	0.00	.00	3	7.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82429	0.	.00	.01	72.3	0.00	.00	3	7.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82445	0.	.00	.01	72.4	0.00	.00	3	8.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
825 1	0.	.00	.01	45.3	0.00	.00	3	8.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82517	0.	.00	.01	11.7	0.00	.00	3	4.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82533	0.	.00	.00	4.3	0.00	.00	3	4.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82549	0.	.00	.00	1.7	0.00	.00	3	7.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
826 5	0.	.00	.00	1.0	0.00	.00	3	7.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DATE: 3/24/80 NATURAL ICING ENCOUNTER FLIGHT 25 TAPE RECORD # 26

TIME (LST)	IRU (CNTS)	MR 10 (G/M3)	MR 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
82621	0.	.00	.00	.8	0.00	.00	3	6.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82637	0.	.00	0.00	.3	0.00	.00	3	6.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82653	0.	.00	0.00	-.4	0.00	.00	3	4.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
827 9	0.	.00	.00	-1.1	0.00	.00	3	4.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82725	0.	.00	0.00	-1.8	0.00	.00	3	3.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82741	0.	.00	.01	-2.7	0.00	.00	3	3.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82757	0.	.00	.01	-3.1	0.00	.00	3	2.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82813	0.	.00	0.00	-3.8	0.00	.00	5	2.	35	55	8	0	0	0	0	0	0	0	0	0	0	0	0
82829	0.	.00	.01	-3.5	0.00	.00	8	13.	7	34	46	9	2	0	0	0	0	0	0	0	0	0	0
82845	0.	.00	.06	-3.4	0.00	.00	9	13.	1	15	58	21	2	0	0	0	0	0	0	0	0	0	0
829 1	0.	.00	.22	-3.9	0.00	.13	9	355.	0	7	50	33	6	0	0	0	0	0	0	0	0	0	0
82917	5.	.06	.29	-4.7	0.00	.11	9	355.	0	11	53	28	4	0	0	0	0	0	0	0	0	0	0
82933	12.	.11	.05	-5.1	0.00	.05	8	288.	2	21	56	16	1	0	0	0	0	0	0	0	0	0	0
82949	12.	.11	.16	-5.2	0.00	.06	8	288.	2	19	57	18	1	0	0	0	0	0	0	0	0	0	0
830 5	12.	.11	.33	-5.3	0.00	.10	9	400.	1	14	56	23	3	0	0	0	0	0	0	0	0	0	0
83021	23.	.09	.18	-5.3	0.00	.12	9	400.	0	12	55	26	3	0	0	0	0	0	0	0	0	0	0
83037	26.	.09	.20	-5.4	0.00	.13	9	518.	1	14	57	23	3	0	0	0	0	0	0	0	0	0	0
83053	26.	.09	.35	-5.4	0.00	.15	9	518.	0	14	53	25	4	0	0	0	0	0	0	0	0	0	0
831 9	45.	.09	.10	-5.4	0.00	.14	9	502.	0	14	57	23	3	0	0	0	0	0	0	0	0	0	0
83125	46.	.09	.25	-5.5	0.00	.13	9	502.	1	15	51	24	6	0	0	0	0	0	0	0	0	0	0
83141	54.	.10	.28	-5.5	0.00	.12	9	394.	0	12	51	27	5	0	0	0	0	0	0	0	0	0	0
83157	65.	.10	.15	-5.6	0.00	.14	10	394.	0	8	46	33	9	1	0	0	0	0	0	0	0	0	0
83213	71.	.11	.30	-5.5	0.00	.12	9	379.	0	10	49	30	6	0	0	0	0	0	0	0	0	0	0
83229	91.	.14	.08	-5.5	0.00	.10	9	379.	1	14	51	26	4	0	0	0	0	0	0	0	0	0	0
83245	91.	.14	.28	-5.5	0.00	.12	9	377.	0	11	50	29	5	0	0	0	0	0	0	0	0	0	0
833 1	111.	.13	.18	-5.5	0.00	.14	9	377.	0	7	50	33	6	0	0	0	0	0	0	0	0	0	0
83317	116.	.14	.30	-5.4	0.00	.18	9	473.	0	6	53	31	6	0	1	0	0	0	0	0	0	0	0
83333	139.	.17	.17	-5.5	0.00	.16	9	473.	0	9	51	30	5	0	1	0	0	0	0	0	0	0	0
83349	156.	.22	.20	-5.4	0.00	.24	9	645.	0	7	53	29	5	0	1	0	0	0	0	0	0	0	0
834 5	172.	.23	.23	-5.5	0.00	.26	10	645.	0	5	51	32	7	0	2	0	0	0	0	0	0	0	0
83421	188.	.24	.26	-5.8	0.00	.23	10	573.	0	5	48	35	7	0	1	0	0	0	0	0	0	0	0
83437	207.	.18	.15	-5.8	0.00	.25	10	573.	0	5	41	39	10	1	1	0	0	0	0	0	0	0	0
83453	213.	.17	.28	-6.1	0.00	.23	12	360.	0	2	20	52	20	2	1	0	0	0	0	0	0	0	0
835 9	232.	.16	.14	-6.5	0.00	.28	12	360.	0	1	12	49	30	4	1	0	0	0	0	0	0	0	0
83525	232.	.16	.27	-6.6	0.00	.21	13	213.	0	0	5	38	45	7	1	0	0	0	0	0	0	0	0
83541	232.	.16	.32	-6.7	0.00	.13	13	213.	0	2	8	38	39	8	1	0	0	0	0	0	0	0	0
83557	232.	.16	.33	-6.8	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
83613	232.	.16	.33	-6.7	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
83629	232.	.16	.33	-6.6	0.00	.04	13	61.	0	2	10	41	38	5	0	0	0	0	0	0	0	0	0
83645	237.	.06	.30	-7.3	0.00	.05	12	61.	0	1	8	48	34	5	1	0	0	0	0	0	0	0	0
837 1	242.	.02	0.00	-7.2	0.00	.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
83717	242.	.02	.18	-7.8	0.00	.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
83733	293.	.27	.07	-7.9	0.00	.14	13	155.	0	1	6	44	39	6	1	0	0	0	0	0	0	0	0
83749	314.	.28	.16	-8.1	0.00	.15	13	155.	0	0	5	43	41	6	2	0	0	0	0	0	0	0	0
838 5	337.	.29	.03	-7.6	0.00	.41	13	414.	0	0	4	41	44	6	1	0	0	0	0	0	0	0	0
83821	342.	.25	.27	-7.7	0.00	.38	13	414.	0	1	6	45	39	6	1	0	0	0	0	0	0	0	0
83837	367.	.17	0.00	-7.7	0.00	.21	13	229.	0	1	5	40	44	6	1	0	0	0	0	0	0	0	0
83853	367.	.17	.16	-7.6	0.00	.22	13	229.	0	0	5	42	42	6	1	0	0	0	0	0	0	0	0
839 9	367.	.17	.32	-7.4	0.00	.08	13	87.	0	1	7	41	42	6	1	0	0	0	0	0	0	0	0
83925	385.	.10	.38	-7.5	0.00	.08	13	87.	0	1	5	38	46	7	1	0	0	0	0	0	0	0	0

DATE: 3/24/80 NATURAL ICING ENCOUNTER FLIGHT 25 TAPE RECORD # 51

TIME (LST)	IRU (CNTS)	MK 10 (G/M3)	MK 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
83941	391.	.09	0.00	-7.8	0.00	.40	14	378.	0	0	3	34	49	9	2	0	0	0	0	0	0	0	0
83957	391.	.09	.29	-7.5	0.00	.38	14	378.	0	0	3	33	51	8	1	0	0	0	0	0	0	0	0
84013	419.	.15	.09	-7.4	0.00	.18	13	181.	0	0	4	39	44	7	1	0	0	0	0	0	0	0	0
84029	440.	.23	.19	-7.6	0.00	.17	13	181.	0	0	5	43	41	6	1	0	0	0	0	0	0	0	0
84045	464.	.28	.21	-7.5	0.00	.19	13	193.	0	0	6	41	41	7	2	0	0	0	0	0	0	0	0
841 1	485.	.28	.22	-7.2	0.00	.17	13	193.	0	1	8	45	35	6	2	0	0	0	0	0	0	0	0
84117	509.	.29	.24	-6.9	0.00	.33	12	401.	0	1	10	49	31	5	2	0	0	0	0	0	0	0	0
84133	533.	.30	.20	-6.7	0.00	.28	12	401.	0	1	15	52	23	4	1	0	0	0	0	0	0	0	0
84149	552.	.24	.16	-6.5	0.00	.22	11	388.	0	3	23	48	19	3	1	0	0	0	0	0	0	0	0
842 5	566.	.23	.25	-6.2	0.00	.20	11	388.	0	4	31	43	15	2	1	0	0	0	0	0	0	0	0
84221	582.	.22	.17	-6.0	0.00	.17	10	394.	0	5	42	34	12	2	1	0	0	0	0	0	0	0	0
84237	590.	.18	.28	-5.8	0.00	.16	10	394.	0	6	42	33	12	2	1	0	0	0	0	0	0	0	0
84253	604.	.14	.12	-5.8	0.00	.12	11	284.	0	6	34	38	14	3	1	0	0	0	0	0	0	0	0
843 9	608.	.14	.30	-5.7	0.00	.12	10	284.	0	5	39	39	10	1	1	0	0	0	0	0	0	0	0
84325	630.	.14	.13	-5.8	0.00	.17	10	425.	0	6	45	34	8	1	1	0	0	0	0	0	0	0	0
84341	637.	.15	.21	-5.8	0.00	.17	10	425.	0	6	46	34	8	1	1	0	0	0	0	0	0	0	0
84357	651.	.15	.24	-5.8	0.00	.15	9	394.	0	6	51	31	6	1	1	0	0	0	0	0	0	0	0
84413	667.	.17	.20	-5.9	0.00	.14	10	394.	0	8	47	31	9	2	1	0	0	0	0	0	0	0	0
84429	671.	.17	.19	-5.9	0.00	.13	9	380.	0	10	48	28	8	2	1	0	0	0	0	0	0	0	0
84445	674.	.15	.38	-5.9	0.00	.10	9	380.	0	15	49	22	7	2	1	0	0	0	0	0	0	0	0
845 1	694.	.11	.09	-5.9	0.00	.09	9	347.	1	16	43	22	10	3	1	0	0	0	0	0	0	0	0
84517	694.	.11	.14	-5.9	0.00	.07	8	347.	1	25	56	13	2	0	0	0	0	0	0	0	0	0	0
84533	695.	.11	.28	-6.1	0.00	.10	9	351.	0	14	52	23	5	1	1	0	0	0	0	0	0	0	0
84549	705.	.09	.35	-6.4	0.00	.12	9	351.	0	9	52	28	6	1	1	0	0	0	0	0	0	0	0
846 5	716.	.08	.06	-6.7	0.00	.14	9	413.	0	7	51	31	6	0	1	0	0	0	0	0	0	0	0
84621	718.	.10	.33	-7.0	0.00	.17	10	413.	0	5	46	37	7	0	1	0	0	0	0	0	0	0	0
84637	748.	.17	.00	-7.2	0.00	.20	10	557.	0	7	45	36	8	0	0	0	0	0	0	0	0	0	0
84653	748.	.17	.26	-7.1	0.00	.20	9	557.	0	7	56	29	4	0	1	0	0	0	0	0	0	0	0
847 9	769.	.15	.19	-7.2	0.00	.19	9	555.	0	9	57	26	4	0	1	0	0	0	0	0	0	0	0
84725	775.	.15	.22	-6.9	0.00	.17	9	555.	0	12	57	24	3	0	1	0	0	0	0	0	0	0	0
84741	790.	.15	.21	-6.7	0.00	.21	9	589.	0	7	55	29	4	0	1	0	0	0	0	0	0	0	0
84757	799.	.15	.24	-6.8	0.00	.22	9	589.	0	7	55	28	5	0	1	0	0	0	0	0	0	0	0
84813	802.	.14	.37	-6.9	0.00	.21	9	637.	0	8	57	27	4	0	1	0	0	0	0	0	0	0	0
84829	818.	.10	.41	-6.8	0.00	.10	8	637.	3	31	54	11	0	0	0	0	0	0	0	0	0	0	0
84845	818.	.10	.45	-6.7	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
849 1	818.	.10	.44	-6.8	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
84917	818.	.10	.45	-6.7	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
84933	818.	.10	.31	-6.7	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
84949	817.	.10	0.00	-6.8	0.00	.05	8	349.	3	25	61	9	0	0	0	0	0	0	0	0	0	0	0
850 5	817.	.10	0.00	-6.7	0.00	.03	7	349.	9	39	47	4	0	0	0	0	0	0	0	0	0	0	0
85021	817.	.10	.09	-6.9	0.00	.08	8	457.	2	24	62	9	0	0	0	0	0	0	0	0	0	0	0
85037	817.	.10	.12	-6.7	0.00	.06	8	457.	5	32	55	7	0	0	0	0	0	0	0	0	0	0	0
85053	817.	.10	.11	-6.5	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
851 9	818.	.07	.10	-6.7	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85125	817.	.00	.09	-6.6	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85141	817.	.00	.11	-6.7	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85157	817.	.00	.11	-6.7	0.00	.00	5	0.	33	51	15	0	0	0	0	0	0	0	0	0	0	0	0
85213	817.	.00	.09	-6.8	0.00	.00	5	0.	37	53	8	0	0	0	0	0	0	0	0	0	0	0	0
85229	817.	.00	.10	-6.8	0.00	.01	5	155.	22	57	19	1	0	0	0	0	0	0	0	0	0	0	0
85245	817.	.00	.12	-6.9	0.00	.01	5	155.	31	56	12	0	0	0	0	0	0	0	0	0	0	0	0

DATE: 3/24/80 NATURAL ICING ENCOUNTER FLIGHT 25 TAPE RECORD # 76

TIME (LST)	IRU (CNTS)	MK 10 (G/M3)	MK 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
853 1	817.	.00	.12	-6.8	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85317	817.	.00	.12	-6.8	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85333	817.	.00	.11	-6.6	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85349	817.	.00	.16	-6.1	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
854 5	817.	.00	.20	-6.4	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85421	817.	.00	.19	-6.5	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85437	817.	.00	.19	-6.3	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85453	817.	.00	.19	-6.0	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
855 9	817.	.00	.18	-5.7	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85525	817.	.00	.18	-5.7	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85541	817.	.00	.18	-5.5	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85557	817.	.00	.16	-5.5	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85613	817.	.00	.15	-5.5	0.00	.01	4	283.	51	45	2	0	0	0	0	0	0	0	0	0	0	0	0
85629	817.	.00	.16	-5.5	0.00	.01	5	283.	38	52	8	0	0	0	0	0	0	0	0	0	0	0	0
85645	817.	.00	.24	-5.6	0.00	.03	6	451.	12	62	24	0	0	0	0	0	0	0	0	0	0	0	0
857 1	817.	.00	.27	-5.5	0.00	.03	6	451.	13	51	33	0	0	0	0	0	0	0	0	0	0	0	0
85717	817.	.00	.29	-5.5	0.00	.00	5	45.	21	57	21	0	0	0	0	0	0	0	0	0	0	0	0
85733	817.	.00	.29	-5.5	0.00	.00	4	45.	46	46	7	0	0	0	0	0	0	0	0	0	0	0	0
85749	41.	.00	.30	-5.5	0.00	.00	8	0.	4	26	39	13	8	5	1	0	0	0	0	0	0	0	0
858 5	0.	.00	.34	-5.6	0.00	.00	8	0.	2	22	49	12	7	3	0	0	0	0	0	0	0	0	0
85821	13.	.01	.29	-5.6	0.00	.07	8	403.	2	24	59	10	2	0	0	0	0	0	0	0	0	0	0
85837	22.	.01	.04	-5.6	0.00	.09	8	403.	1	22	59	11	3	1	0	0	0	0	0	0	0	0	0
85853	22.	.01	.17	-5.5	0.00	.09	8	423.	1	24	50	15	6	1	0	0	0	0	0	0	0	0	0
859 9	22.	.01	.32	-5.5	0.00	.09	9	423.	1	19	44	19	9	3	1	0	0	0	0	0	0	0	0
85925	33.	.05	.36	-5.4	0.00	.06	8	320.	2	25	51	13	4	1	0	0	0	0	0	0	0	0	0
85941	46.	.07	.04	-5.4	0.00	.06	8	320.	2	23	52	14	5	1	0	0	0	0	0	0	0	0	0
85957	46.	.07	.16	-5.4	0.00	.09	8	396.	1	21	57	16	2	0	0	0	0	0	0	0	0	0	0
9 013	47.	.08	.36	-5.3	0.00	.11	9	396.	0	14	53	23	5	1	0	0	0	0	0	0	0	0	0
9 029	73.	.10	.06	-5.3	0.00	.10	9	367.	0	14	47	24	8	2	0	0	0	0	0	0	0	0	0
9 045	73.	.10	.22	-5.3	0.00	.12	10	367.	0	11	41	27	13	3	1	0	0	0	0	0	0	0	0
9 1 1	82.	.11	.25	-5.2	0.00	.14	10	389.	0	9	41	35	9	1	1	0	0	0	0	0	0	0	0
9 117	95.	.11	.20	-5.2	0.00	.17	11	389.	0	5	33	44	12	2	1	0	0	0	0	0	0	0	0
9 133	110.	.15	.23	-5.2	0.00	.15	10	389.	0	7	39	34	13	2	1	0	0	0	0	0	0	0	0
9 149	121.	.17	.13	-5.1	0.00	.14	10	389.	0	9	41	32	11	2	1	0	0	0	0	0	0	0	0
9 2 5	124.	.16	.33	-5.1	0.00	.15	10	388.	0	7	42	35	11	1	1	0	0	0	0	0	0	0	0
9 221	145.	.12	.07	-5.0	0.00	.13	9	388.	0	9	50	30	7	0	1	0	0	0	0	0	0	0	0
9 237	145.	.12	.27	-5.1	0.00	.14	9	449.	0	11	51	27	6	1	0	0	0	0	0	0	0	0	0
9 253	157.	.11	.24	-5.0	0.00	.14	9	449.	0	12	47	29	8	1	1	0	0	0	0	0	0	0	0
9 3 9	167.	.11	.18	-5.0	0.00	.14	10	382.	0	9	46	33	7	1	1	0	0	0	0	0	0	0	0
9 325	173.	.14	.22	-5.0	0.00	.17	10	382.	0	5	41	39	10	1	1	0	0	0	0	0	0	0	0
9 341	180.	.15	.26	-5.1	0.00	.20	10	454.	0	5	41	40	9	1	1	0	0	0	0	0	0	0	0
9 357	201.	.19	.14	-5.1	0.00	.22	11	454.	0	3	35	45	10	1	1	0	0	0	0	0	0	0	0
9 413	213.	.20	.23	-5.4	0.00	.26	11	411.	0	2	20	56	16	2	1	0	0	0	0	0	0	0	0
9 429	230.	.21	.27	-5.8	0.00	.29	12	411.	0	1	15	57	20	3	1	0	0	0	0	0	0	0	0
9 445	249.	.19	.13	-6.0	0.00	.22	12	311.	0	1	13	56	22	3	1	0	0	0	0	0	0	0	0
9 5 1	261.	.19	.22	-6.1	0.00	.22	12	311.	0	2	14	48	29	4	1	0	0	0	0	0	0	0	0
9 517	275.	.20	.29	-6.2	0.00	.31	12	431.	0	1	13	50	24	3	1	0	0	0	0	0	0	0	0
9 533	297.	.22	.16	-6.2	0.00	.30	12	431.	0	1	15	49	26	4	1	0	0	0	0	0	0	0	0
9 549	317.	.25	.16	-6.2	0.00	.29	12	433.	0	2	16	49	25	4	1	0	0	0	0	0	0	0	0
9 6 5	337.	.26	.20	-6.2	0.00	.30	12	433.	0	2	15	46	28	4	1	0	0	0	0	0	0	0	0

DATE: 3/28/80 NATURAL ICING ENCOUNTER FLIGHT 25 TAPE RECORD # 101

TIME (LST)	IRU (CNTS)	MR 10 (G/M3)	MR 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
9 621	353.	.28	.26	-6.2	0.00	.27	12	409.	0	2	17	45	26	4	1	0	0	0	0	0	0	0	0
9 637	378.	.24	.13	-6.1	0.00	.25	12	409.	0	2	20	50	21	3	1	0	0	0	0	0	0	0	0
9 653	392.	.21	.19	-6.1	0.00	.20	12	317.	0	2	18	48	24	4	1	0	0	0	0	0	0	0	0
9 7 9	402.	.20	.29	-6.1	0.00	.20	12	317.	0	2	16	45	28	4	1	0	0	0	0	0	0	0	0
9 725	421.	.17	.15	-6.1	0.00	.22	12	335.	0	2	17	50	23	4	1	0	0	0	0	0	0	0	0
9 741	439.	.23	.19	-6.1	0.00	.25	12	335.	0	1	12	52	26	4	1	0	0	0	0	0	0	0	0
9 757	457.	.26	.22	-6.1	0.00	.30	12	394.	0	1	12	52	27	4	1	0	0	0	0	0	0	0	0
9 813	482.	.26	.24	-6.0	0.00	.28	12	394.	0	1	14	57	21	3	1	0	0	0	0	0	0	0	0
9 829	507.	.29	.17	-6.0	0.00	.31	12	420.	0	1	13	57	21	4	1	0	0	0	0	0	0	0	0
9 845	531.	.30	.18	-6.0	0.00	.34	12	420.	0	1	11	55	26	4	1	0	0	0	0	0	0	0	0
9 9 1	555.	.31	.17	-6.0	0.00	.37	12	437.	0	0	10	52	29	5	1	0	0	0	0	0	0	0	0
9 917	576.	.29	.20	-6.0	0.00	.33	12	437.	0	1	12	50	29	5	1	0	0	0	0	0	0	0	0
9 933	591.	.26	.29	-5.9	0.00	.20	12	311.	0	2	16	47	26	4	1	0	0	0	0	0	0	0	0
9 949	612.	.20	.10	-5.8	0.00	.19	12	311.	0	3	19	43	26	4	1	0	0	0	0	0	0	0	0
910 5	621.	.19	.23	-5.6	0.00	.25	12	380.	0	2	17	48	25	4	1	0	0	0	0	0	0	0	0
91021	636.	.18	.21	-5.4	0.00	.25	12	380.	0	2	18	49	23	4	1	0	0	0	0	0	0	0	0
91037	649.	.17	.21	-5.2	0.00	.13	12	202.	0	2	18	48	24	4	1	0	0	0	0	0	0	0	0
91053	660.	.17	.27	-5.2	0.00	.15	12	202.	0	1	14	47	28	4	1	0	0	0	0	0	0	0	0
911 9	685.	.22	.16	-5.0	0.00	.29	12	374.	0	1	12	48	30	4	1	0	0	0	0	0	0	0	0
91125	704.	.25	.17	-4.9	0.00	.30	12	374.	0	1	10	51	30	4	1	0	0	0	0	0	0	0	0
91141	726.	.29	.18	-4.9	0.00	.33	12	412.	0	1	11	53	27	4	1	0	0	0	0	0	0	0	0
91157	750.	.31	.20	-4.9	0.00	.31	12	412.	0	1	12	54	24	4	1	0	0	0	0	0	0	0	0
91213	772.	.30	.25	-5.0	0.00	.33	12	483.	0	1	15	57	19	3	1	0	0	0	0	0	0	0	0
91229	790.	.28	.22	-4.7	0.00	.34	12	483.	0	1	15	54	22	4	1	0	0	0	0	0	0	0	0
91245	813.	.25	.14	-4.4	0.00	.31	12	454.	0	1	16	57	18	3	1	0	0	0	0	0	0	0	0
913 1	827.	.24	.20	-4.3	0.00	.33	12	454.	0	1	13	60	19	3	1	0	0	0	0	0	0	0	0
91317	841.	.23	.25	-4.4	0.00	.27	12	369.	0	1	13	51	27	4	1	0	0	0	0	0	0	0	0
91333	858.	.22	.22	-4.4	0.00	.30	12	369.	0	1	11	50	29	5	1	0	0	0	0	0	0	0	0
91349	877.	.25	.12	-4.3	0.00	.36	12	446.	0	1	10	52	28	4	1	0	0	0	0	0	0	0	0
914 5	890.	.25	.18	-4.3	0.00	.37	12	446.	0	1	10	50	31	4	1	0	0	0	0	0	0	0	0
91421	901.	.24	.30	-4.4	0.00	.27	12	359.	0	1	11	52	27	4	1	0	0	0	0	0	0	0	0
91437	918.	.19	.10	-4.1	0.00	.25	12	359.	0	1	13	51	26	4	1	0	0	0	0	0	0	0	0
91453	925.	.20	.22	-4.0	0.00	.27	12	445.	0	3	18	46	25	4	1	0	0	0	0	0	0	0	0
915 9	934.	.20	.24	-3.8	0.00	.29	12	445.	0	2	18	48	24	4	2	0	0	0	0	0	0	0	0
91525	948.	.21	.16	-3.7	0.00	.26	12	350.	0	1	12	52	27	4	1	0	0	0	0	0	0	0	0
91541	91.	.23	.20	-3.7	0.00	.28	12	350.	0	1	11	51	29	4	1	0	0	0	0	0	0	0	0
91557	31.	.26	.24	-3.7	0.00	.25	12	315.	0	1	11	51	28	5	1	0	0	0	0	0	0	0	0
91613	58.	.30	.18	-3.8	0.00	.24	12	315.	0	1	12	56	23	4	1	0	0	0	0	0	0	0	0
91629	81.	.28	.18	-3.8	0.00	.29	12	383.	0	1	12	60	20	4	1	0	0	0	0	0	0	0	0
91645	102.	.26	.18	-3.8	0.00	.30	12	383.	0	1	10	60	21	4	1	0	0	0	0	0	0	0	0
917 1	119.	.25	.24	-4.0	0.00	.36	12	508.	0	1	15	56	20	4	1	0	0	0	0	0	0	0	0
91717	139.	.26	.24	-3.8	0.00	.37	12	508.	0	1	15	56	20	4	2	0	0	0	0	0	0	0	0
91733	162.	.24	.14	-3.6	0.00	.38	12	493.	0	1	13	55	23	4	1	0	0	0	0	0	0	0	0
91749	178.	.23	.19	-3.5	0.00	.41	12	493.	0	0	10	52	28	5	1	0	0	0	0	0	0	0	0
918 5	202.	.29	.16	-3.6	0.00	.42	12	476.	0	0	8	49	33	5	1	0	0	0	0	0	0	0	0
91821	218.	.33	.15	-3.6	0.00	.37	12	476.	0	1	10	48	32	4	1	0	0	0	0	0	0	0	0
91837	239.	.25	.17	-3.5	0.00	.24	12	338.	0	1	14	49	28	4	1	0	0	0	0	0	0	0	0
91853	253.	.23	.30	-3.5	0.00	.24	12	338.	0	1	14	51	25	4	1	0	0	0	0	0	0	0	0
919 9	277.	.21	.11	-3.4	0.00	.35	12	457.	0	1	12	53	26	4	1	0	0	0	0	0	0	0	0
91925	299.	.27	.17	-3.6	0.00	.38	12	457.	0	0	10	54	27	4	1	0	0	0	0	0	0	0	0

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TIME (LST)	IRU (CNTS)	WK 10 (G/M3)	WK 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
91941	325.	.30	.18	-3.7	0.00	.40	12	491.	0	1	11	53	27	4	1	0	0	0	0	0	0	0	0
91957	344.	.29	.23	-3.8	0.00	.38	12	491.	0	1	12	53	26	4	1	0	0	0	0	0	0	0	0
92013	365.	.25	.22	-3.8	0.00	.30	12	400.	0	1	12	54	24	4	1	0	0	0	0	0	0	0	0
92029	390.	.26	.13	-3.8	0.00	.29	12	400.	0	1	14	56	20	4	2	0	0	0	0	0	0	0	0
92045	408.	.26	.17	-4.5	0.00	.43	12	570.	0	1	12	58	20	4	1	0	0	0	0	0	0	0	0
921 1	420.	.25	.28	-5.5	0.00	.43	12	570.	0	1	13	54	24	4	1	0	0	0	0	0	0	0	0
92117	443.	.20	.14	-5.8	0.00	.39	12	455.	0	0	10	51	29	5	2	0	0	0	0	0	0	0	0
92133	466.	.28	.18	-6.0	0.00	.40	12	455.	0	0	8	49	32	6	1	0	0	0	0	0	0	0	0
92149	485.	.25	.18	-6.0	0.00	.39	13	443.	0	1	7	45	38	5	1	0	0	0	0	0	0	0	0
922 5	496.	.23	.09	-6.2	0.00	.36	13	443.	0	1	8	43	39	5	1	0	0	0	0	0	0	0	0
92221	511.	.23	.19	-6.1	0.00	.24	12	316.	0	1	10	48	34	6	1	0	0	0	0	0	0	0	0
92237	531.	.22	.20	-5.9	0.00	.24	12	316.	0	1	12	45	32	5	1	0	0	0	0	0	0	0	0
92253	552.	.20	.18	-5.7	0.00	.24	12	321.	0	2	12	46	30	5	1	0	0	0	0	0	0	0	0
923 9	566.	.21	.26	-5.6	0.00	.23	12	321.	0	2	14	45	30	5	1	0	0	0	0	0	0	0	0
92325	585.	.23	.09	-5.5	0.00	.16	12	246.	0	2	15	48	26	4	1	0	0	0	0	0	0	0	0
92341	600.	.23	.20	-5.2	0.00	.20	12	246.	0	1	11	52	26	5	2	0	0	0	0	0	0	0	0
92357	626.	.26	.20	-5.2	0.00	.43	12	496.	0	0	9	51	30	6	2	0	0	0	0	0	0	0	0
92413	652.	.31	.22	-5.1	0.00	.41	12	496.	0	1	10	52	27	5	2	0	0	0	0	0	0	0	0
92429	673.	.32	.26	-5.0	0.00	.37	12	519.	0	1	14	54	22	4	2	0	0	0	0	0	0	0	0
92445	694.	.22	.14	-4.8	0.00	.35	12	519.	0	1	16	56	18	4	2	0	0	0	0	0	0	0	0
925 1	709.	.23	.20	-4.9	0.00	.29	12	377.	0	1	12	52	26	5	2	0	0	0	0	0	0	0	0
92517	725.	.24	.23	-5.4	0.00	.32	13	377.	0	1	9	46	34	6	2	0	0	0	0	0	0	0	0
92533	746.	.23	.15	-6.0	0.00	.31	13	353.	0	1	8	44	37	6	2	0	0	0	0	0	0	0	0
92549	763.	.23	.16	-6.5	0.00	.28	13	353.	0	1	10	44	34	6	2	0	0	0	0	0	0	0	0
926 5	771.	.23	.25	-7.6	0.00	.21	13	252.	0	1	9	44	36	6	1	0	0	0	0	0	0	0	0
92621	796.	.21	.12	-7.4	0.00	.20	13	252.	0	1	9	44	35	6	1	0	0	0	0	0	0	0	0
92637	807.	.20	.32	-7.4	0.00	.30	13	376.	0	1	9	44	36	5	1	0	0	0	0	0	0	0	0
92653	821.	.19	.11	-7.3	0.00	.28	13	376.	0	2	12	42	35	6	1	0	0	0	0	0	0	0	0
927 9	834.	.20	.20	-7.1	0.00	.29	12	383.	0	2	13	43	32	6	2	0	0	0	0	0	0	0	0
92725	849.	.21	.27	-7.0	0.00	.27	12	383.	0	2	14	46	30	5	1	0	0	0	0	0	0	0	0
92741	868.	.20	.12	-7.0	0.00	.23	12	314.	0	2	12	45	32	5	1	0	0	0	0	0	0	0	0
92757	872.	.19	.30	-7.1	0.00	.25	12	314.	0	1	10	45	34	5	1	0	0	0	0	0	0	0	0
92813	890.	.17	.08	-7.1	0.00	.24	13	305.	0	1	9	45	35	6	1	0	0	0	0	0	0	0	0
92829	898.	.19	.23	-7.2	0.00	.25	13	305.	0	1	9	46	35	5	1	0	0	0	0	0	0	0	0
92845	914.	.22	.23	-7.1	0.00	.26	12	311.	0	1	10	48	32	5	1	0	0	0	0	0	0	0	0
929 1	929.	.24	.19	-7.0	0.00	.24	12	311.	0	1	12	56	23	4	1	0	0	0	0	0	0	0	0
92917	944.	.30	.18	-7.0	0.00	.38	12	488.	0	0	12	59	21	4	1	0	0	0	0	0	0	0	0
92933	958.	.30	.17	-6.9	0.00	.35	12	488.	0	1	14	58	19	3	1	0	0	0	0	0	0	0	0
92949	970.	.30	.16	-6.8	0.00	.34	12	492.	0	1	15	55	20	4	1	0	0	0	0	0	0	0	0
930 5	26.	.29	.22	-6.7	0.00	.37	12	492.	0	1	13	52	26	4	1	0	0	0	0	0	0	0	0
93021	28.	.27	.23	-6.6	0.00	.29	12	370.	0	1	11	51	28	5	1	0	0	0	0	0	0	0	0
93037	52.	.24	.13	-6.5	0.00	.29	12	370.	0	1	12	52	27	4	1	0	0	0	0	0	0	0	0
93053	73.	.27	.17	-6.5	0.00	.37	12	449.	0	1	11	49	30	5	1	0	0	0	0	0	0	0	0
931 9	90.	.28	.19	-6.5	0.00	.37	13	449.	0	1	9	46	35	5	1	0	0	0	0	0	0	0	0
93125	109.	.28	.25	-6.4	0.00	.26	12	328.	0	1	10	47	33	5	1	0	0	0	0	0	0	0	0
93141	137.	.25	.12	-6.2	0.00	.25	12	328.	0	1	11	47	31	5	1	0	0	0	0	0	0	0	0
93157	157.	.26	.16	-6.1	0.00	.38	12	477.	0	1	11	47	31	5	1	0	0	0	0	0	0	0	0
93213	182.	.30	.19	-6.1	0.00	.41	12	477.	0	1	9	47	33	6	1	0	0	0	0	0	0	0	0
93229	203.	.30	.21	-6.1	0.00	.33	12	417.	0	1	12	51	28	4	1	0	0	0	0	0	0	0	0
93245	222.	.28	.27	-6.0	0.00	.32	12	417.	0	1	12	51	27	5	1	0	0	0	0	0	0	0	0

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TIME (LST)	IRU (CNTS)	MR 10 (G/M3)	MR 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
933 1	247.	.25	.09	-6.0	0.00	.24	12	318.	0	1	12	50	28	5	1	0	0	0	0	0	0	0	0
93317	261.	.23	.21	-5.9	0.00	.23	12	318.	0	1	14	55	21	3	1	0	0	0	0	0	0	0	0
93333	279.	.22	.23	-5.7	0.00	.29	12	454.	0	2	19	55	18	3	1	0	0	0	0	0	0	0	0
93349	299.	.23	.14	-5.6	0.00	.31	12	454.	0	2	17	51	23	3	1	0	0	0	0	0	0	0	0
934 5	312.	.21	.21	-6.0	0.00	.26	12	342.	0	1	12	49	29	5	1	0	0	0	0	0	0	0	0
93421	330.	.21	.25	-6.0	0.00	.26	12	342.	0	1	12	46	32	5	1	0	0	0	0	0	0	0	0
93437	351.	.24	.15	-6.0	0.00	.29	12	385.	0	2	12	43	33	6	1	0	0	0	0	0	0	0	0
93453	371.	.25	.15	-5.9	0.00	.28	12	385.	0	1	13	47	28	5	2	0	0	0	0	0	0	0	0
935 9	383.	.24	.28	-6.0	0.00	.33	12	440.	0	1	12	46	31	5	1	0	0	0	0	0	0	0	0
93525	404.	.19	.15	-5.9	0.00	.31	12	440.	0	2	16	46	26	5	2	0	0	0	0	0	0	0	0
93541	426.	.26	.14	-5.9	0.00	.31	12	488.	0	2	17	42	29	5	2	0	0	0	0	0	0	0	0
93557	434.	.26	.30	-5.6	0.00	.32	12	488.	0	2	16	43	29	5	1	0	0	0	0	0	0	0	0
93613	458.	.17	.09	-5.7	0.00	.25	12	374.	0	2	15	46	28	5	1	0	0	0	0	0	0	0	0
93629	466.	.18	.22	-5.7	0.00	.25	12	374.	0	2	16	47	26	4	1	0	0	0	0	0	0	0	0
93645	482.	.19	.26	-5.8	0.00	.28	12	379.	0	1	12	45	32	5	1	0	0	0	0	0	0	0	0
937 1	501.	.19	.15	-5.8	0.00	.27	12	379.	0	2	14	45	30	5	1	0	0	0	0	0	0	0	0
93717	512.	.21	.22	-5.6	0.00	.31	12	430.	0	2	14	48	28	4	1	0	0	0	0	0	0	0	0
93733	533.	.23	.20	-5.4	0.00	.31	12	430.	0	1	14	56	20	4	2	0	0	0	0	0	0	0	0
93749	561.	.28	.12	-5.3	0.00	.42	12	558.	0	0	14	57	20	4	1	0	0	0	0	0	0	0	0
938 5	579.	.27	.16	-5.1	0.00	.32	11	558.	0	2	21	54	16	2	1	0	0	0	0	0	0	0	0
93821	592.	.26	.22	-5.1	0.00	.25	11	440.	0	3	23	51	16	2	2	0	0	0	0	0	0	0	0
93837	613.	.21	.12	-5.0	0.00	.29	12	440.	0	2	18	52	20	3	2	0	0	0	0	0	0	0	0
93853	629.	.22	.29	-5.0	0.00	.40	12	557.	0	1	15	51	24	4	2	0	0	0	0	0	0	0	0
939 9	651.	.26	.16	-5.0	0.00	.44	12	557.	0	1	12	46	31	6	2	0	0	0	0	0	0	0	0
93925	676.	.27	.15	-4.9	0.00	.38	12	475.	0	1	12	46	31	6	2	0	0	0	0	0	0	0	0
93941	695.	.26	.20	-5.0	0.00	.37	12	475.	0	1	12	50	27	5	2	0	0	0	0	0	0	0	0
93957	718.	.26	.23	-4.9	0.00	.37	12	522.	0	1	15	48	26	5	2	0	0	0	0	0	0	0	0
94013	735.	.27	.22	-4.9	0.00	.30	11	522.	0	3	24	45	20	3	2	0	0	0	0	0	0	0	0
94029	757.	.25	.13	-4.9	0.00	.40	12	591.	0	2	18	49	22	4	2	0	0	0	0	0	0	0	0
94045	772.	.24	.20	-4.7	0.00	.35	11	591.	0	3	23	46	20	3	2	0	0	0	0	0	0	0	0
941 1	784.	.23	.23	-4.5	0.00	.22	11	453.	0	4	32	41	16	2	1	0	0	0	0	0	0	0	0
94117	797.	.17	.20	-4.2	0.00	.18	10	453.	0	7	37	38	12	1	1	0	0	0	0	0	0	0	0
94133	805.	.15	.18	-4.1	0.00	.14	10	374.	0	8	41	35	10	1	1	0	0	0	0	0	0	0	0
94149	815.	.15	.23	-3.9	0.00	.14	9	374.	0	6	52	30	6	0	1	0	0	0	0	0	0	0	0
942 5	828.	.15	.22	-3.5	0.00	.19	9	544.	0	7	59	25	4	0	1	0	0	0	0	0	0	0	0
94221	842.	.16	.19	-3.1	0.00	.14	9	544.	0	19	59	17	2	0	0	0	0	0	0	0	0	0	0
94237	849.	.16	.14	-2.6	0.00	.10	8	507.	1	27	60	10	0	0	0	0	0	0	0	0	0	0	0
94253	849.	.16	.23	-2.1	0.00	.03	6	507.	15	60	22	1	0	0	0	0	0	0	0	0	0	0	0
943 9	849.	.16	.27	-1.8	0.00	.01	5	337.	39	53	7	0	0	0	0	0	0	0	0	0	0	0	0
94325	849.	.16	.26	-1.5	0.00	.00	3	337.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94341	849.	.16	.25	-1.3	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94357	849.	.16	.24	-1.2	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94413	849.	.16	.23	-2.2	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94429	849.	.16	.22	-2.1	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94445	849.	.16	.21	-1.9	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
945 1	849.	.16	.20	-1.6	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94517	849.	.08	.19	-1.2	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94533	849.	.00	.18	-1.6	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94549	849.	.00	.17	-1.7	0.00	$$$$	39	32767	0	0	0	0	0	1	2	3	5	6	9	12	15	19	23
946 5	849.	.00	.16	-1.5	0.00	$$$$	39	32767	0	0	0	0	0	1	2	3	5	6	9	12	15	19	23

DATE: 3/24/80 NATURAL ICING ENCOUNTER FLIGHT 25 TAPE RECORD # 176

TIME (LST)	IRU (CNTS)	MK 10 (G/M3)	MK 12 (G/M3)	OAT (C)	RSMI (G/M3)	ASP (G/M3)	MVD (MU)	NDM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
94621	849.	.00	.15	-1.3	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94637	849.	.00	.14	-1.1	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94653	849.	.00	.13	-1.0	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
947 9	849.	.00	.11	-.9	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94725	849.	.00	.10	-.9	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94741	849.	.00	.09	-.9	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94757	849.	.00	.08	-.9	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94813	849.	.00	.07	-.8	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94829	849.	.00	.06	-.6	0.00	$$$$	39	32767	0	0	0	0	0	1	2	3	5	6	9	12	15	19	23
94845	849.	.00	.06	-.6	0.00	$$$$	39	32767	0	0	0	0	0	1	2	3	5	6	9	12	15	19	23
949 1	849.	.00	.04	-1.5	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94917	849.	.00	.04	-1.2	0.00	$$$$	39	32767	0	0	0	0	0	1	2	3	5	6	9	12	15	19	23
94933	849.	.00	.03	-.9	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94949	849.	.00	.02	-.5	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
950 5	849.	.00	.01	-.1	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95021	849.	.00	0.00	.2	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95037	849.	.00	0.00	.7	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95053	849.	.00	0.00	1.1	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
951 9	849.	.00	0.00	1.9	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95125	849.	.00	0.00	2.5	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95141	385.	.00	0.00	3.9	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95157	0.	.00	0.00	7.7	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95213	0.	.00	0.00	23.9	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95229	0.	.00	0.00	37.8	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95245	0.	.00	0.00	47.7	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
953 1	0.	.00	0.00	51.0	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95317	0.	.00	0.00	62.3	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95333	0.	0.00	0.00	56.4	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95349	0.	0.00	0.00	-29.9	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
954 5	0.	0.00	0.00	-29.9	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NATURAL ICING ENCOUNTER FLIGHT 25
AIRCRAFT STATE PARAMETERS (JUN-1H 31R)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
94621	34.6	2344.	6.21	99.3	97.4
94637	34.7	2344.	6.1A	99.9	97.4
94653	34.7	2366.	6.1A	96.1	95.3
947 9	34.5	2393.	6.1A	97.0	93.6
94725	34.4	2408.	6.1A	96.9	94.0
94741	34.6	2440.	6.1A	97.2	94.0
94757	34.4	2459.	6.1A	97.1	96.4
94813	30.3	2459.	5.49	90.5	98.5
94829	23.5	2374.	4.49	81.0	97.0
94845	23.1	2192.	4.41	80.4	94.1
949 1	22.2	1985.	4.21	80.1	97.A
94917	21.2	1796.	4.16	78.4	90.3
94933	21.3	1619.	4.19	79.1	89.A
94949	21.6	1441.	4.21	80.0	-35.1
950 5	21.6	1257.	4.19	80.6	-66.0
95021	21.5	1115.	4.16	80.5	-24.6
95037	20.5	1021.	4.02	79.4	3.3
95053	19.6	936.	3.94	78.5	37.0
951 9	17.A	857.	3.62	75.3	45.A
95125	16.1	748.	3.43	73.3	51.A
95141	17.4	66A.	3.70	75.7	4A.4
95157	19.A	631.	4.16	79.5	2A.A
95213	27.0	598.	5.21	89.5	4.7
95229	26.0	614.	5.11	86.9	7.0
95245	26.2	616.	5.22	88.4	6.6
953 1	28.6	596.	5.47	91.6	3.3
95317	22.7	588.	3.43	80.3	6.5
95333	7.4	507.	.22	41.A	6.0
95349	.1	-87.	0.00	-1.3	-.1
954 5	.1	-87.	0.00	-1.3	-.1

NATURAL ICING ENCOUNTER FLIGHT 25
AIRCRAFT STATE PARAMETERS (JUN-JH 31A)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
933 1	38.6	4569.	6.46	101.1	87.9
93317	39.1	4554.	6.46	101.9	92.0
93333	39.8	4441.	6.48	103.3	95.4
93349	39.6	4450.	6.52	103.0	89.0
934 5	38.6	4520.	6.52	101.5	85.1
93421	38.9	4569.	6.53	101.6	88.6
93437	38.8	4613.	6.51	101.6	87.3
93453	39.7	4549.	6.50	102.7	91.0
935 9	37.8	4641.	6.33	100.0	89.5
93525	38.2	4549.	6.26	100.7	92.0
93541	38.5	4524.	6.27	101.3	92.3
93557	37.3	4534.	6.30	99.2	88.5
93613	37.4	4564.	6.31	99.6	88.5
93629	36.7	4608.	6.32	98.2	85.2
93645	37.2	4603.	6.31	98.9	88.5
937 1	37.0	4613.	6.32	98.6	87.8
93717	37.4	4608.	6.32	99.3	90.2
93733	37.4	4586.	6.30	99.3	91.2
93749	37.2	4576.	6.33	99.2	85.3
938 5	37.8	4543.	6.32	100.2	90.1
93821	37.4	4527.	6.33	99.4	88.2
93837	36.7	4547.	6.33	98.4	85.2
93853	36.9	4603.	6.33	98.8	87.0
939 9	36.7	4620.	6.28	98.4	88.3
93925	37.4	4589.	6.27	99.6	90.5
93941	37.2	4596.	6.28	99.2	88.3
93957	37.9	4545.	6.27	100.0	92.3
94013	37.9	4415.	6.27	100.4	97.4
94029	36.6	4415.	6.28	99.1	88.4
94045	35.2	4372.	5.97	96.8	93.8
941 1	33.6	4282.	5.88	95.1	91.8
94117	32.7	4174.	5.64	93.7	90.9
94133	32.6	4052.	5.64	93.9	98.9
94149	32.0	3907.	5.58	93.1	97.5
942 5	30.3	3780.	5.41	91.4	97.8
94221	28.7	3661.	5.11	88.4	98.9
94237	28.2	3518.	5.11	87.9	93.5
94253	27.9	3391.	5.11	87.8	92.8
943 9	27.7	3251.	5.12	87.7	93.8
94325	29.9	3075.	5.48	91.7	98.4
94341	31.5	2951.	5.74	94.2	98.1
94357	32.3	2833.	5.76	95.7	100.9
94413	32.0	2723.	5.78	95.8	101.5
94429	32.0	2641.	5.78	95.2	99.4
94445	31.8	2549.	5.78	95.7	101.8
945 1	31.6	2481.	5.79	95.0	99.8
94517	32.1	2387.	5.78	95.7	100.5
94533	33.7	2359.	6.05	97.6	96.1
94549	32.9	2347.	6.18	98.6	95.4
946 5	34.9	2344.	6.22	99.0	96.8

NATURAL ICING ENCOUNTER FLIGHT 25
AIRCRAFT STATE PARAMETERS (JUN-1H 31A)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
91941	38.2	4548.	6.42	100.4	87.3
91957	38.1	4548.	6.42	100.4	87.0
92013	38.0	4569.	6.41	100.2	88.0
92029	39.1	4497.	6.44	101.8	92.2
92045	39.5	4459.	6.44	102.5	91.1
921 1	38.3	4534.	6.45	100.4	83.3
92117	38.3	4578.	6.46	100.9	82.9
92133	38.8	4594.	6.45	101.7	85.1
92149	37.8	4657.	6.42	100.1	83.3
922 5	37.3	4675.	6.25	99.1	87.7
92221	35.1	4641.	5.97	96.2	88.7
92237	35.1	4571.	5.97	96.4	88.4
92253	35.0	4508.	5.97	96.4	89.0
923 9	36.5	4459.	6.20	98.6	87.9
92325	37.2	4464.	6.41	99.6	85.1
92341	37.5	4520.	6.40	100.0	86.7
92357	38.0	4534.	6.39	100.5	87.0
92413	38.2	4545.	6.39	100.4	88.2
92429	39.1	4506.	6.37	101.9	93.1
92445	39.6	4413.	6.40	102.6	94.0
925 1	38.9	4459.	6.49	101.7	87.7
92517	39.1	4515.	6.53	101.7	84.5
92533	38.9	4580.	6.49	101.5	86.8
92549	38.2	4587.	6.42	100.4	90.3
926 5	38.2	4596.	6.43	100.5	90.3
92621	38.3	4578.	6.42	100.0	91.9
92637	38.3	4585.	6.40	100.1	91.2
92653	37.5	4543.	6.33	99.7	92.5
927 9	37.8	4508.	6.34	100.2	91.5
92725	38.1	4457.	6.34	100.7	92.6
92741	37.2	4494.	6.37	99.3	89.8
92757	38.3	4545.	6.53	100.9	84.1
92813	39.2	4587.	6.62	102.0	87.1
92829	38.8	4638.	6.55	101.4	86.0
92845	39.0	4620.	6.49	101.6	92.7
929 1	39.3	4580.	6.50	102.2	94.7
92917	39.0	4617.	6.50	101.7	88.9
92933	39.4	4571.	6.40	102.2	95.8
92949	39.2	4555.	6.44	101.8	89.5
930 5	38.2	4583.	6.45	100.4	86.0
93021	38.8	4585.	6.43	101.4	90.2
93037	38.2	4569.	6.44	100.6	90.6
93053	37.9	4557.	6.43	100.6	90.8
931 9	37.7	4566.	6.43	100.3	89.1
93125	38.0	4559.	6.42	100.5	90.0
93141	38.6	4593.	6.40	101.2	92.1
93157	39.2	4457.	6.43	102.2	92.9
93213	36.7	4478.	6.50	101.2	85.9
93229	38.7	4531.	6.46	101.3	85.6
93245	38.6	4548.	6.46	101.2	87.0

NATURAL ICING ENCOUNTER FLIGHT 25
AIRCRAFT STATE PARAMETERS (JDH=1F 318)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
9 621	38.2	4446.	6.57	101.2	95.6
9 637	38.1	4415.	6.57	100.8	92.6
9 653	37.8	4439.	6.57	100.4	89.6
9 7 9	37.3	4478.	6.57	99.8	89.1
9 725	37.7	4499.	6.57	100.3	91.5
9 741	37.7	4492.	6.57	100.4	91.1
9 757	38.0	4471.	6.56	100.8	94.3
9 813	38.8	4436.	6.56	102.0	94.8
9 829	38.2	4448.	6.57	100.9	88.9
9 845	38.3	4478.	6.57	101.0	87.5
9 9 1	38.4	4508.	6.57	101.3	88.3
9 917	37.4	4508.	6.34	99.7	93.1
9 933	37.0	4485.	6.33	99.3	91 7
9 949	36.8	4464.	6.33	98.9	90.9
910 5	36.9	4457.	6.33	99.2	89.0
91021	37.0	4434.	6.34	99.3	86.5
91037	36.6	4441.	6.34	98.3	85.0
91053	36.1	4503.	6.34	97.1	83.7
911 9	36.8	4506.	6.34	99.1	88.9
91125	36.9	4503.	6.34	99.0	89.2
91141	37.5	4483.	6.34	99.5	91.2
91157	37.4	4485.	6.34	99.3	88.9
91213	37.4	4476.	6.35	99.3	90.2
91229	37.8	4473.	6.41	100.0	88.2
91245	38.3	4436.	6.41	100.6	89.6
913 1	37.2	4494.	6.35	99.1	85.6
91317	36.8	4534.	6.35	98.4	86.0
91333	37.6	4505.	6.37	99.6	87.7
91349	37.5	4532.	6.38	99.4	88.8
914 5	38.0	4571.	6.37	100.3	90.9
91421	37.8	4566.	6.38	99.8	90.5
91437	38.2	4513.	6.37	100.7	93.5
91453	38.5	4434.	6.36	101.1	92.9
915 9	37.7	4429.	6.34	99.8	89.5
91525	37.0	4485.	6.42	98.8	84.3
91541	37.2	4538.	6.41	99.2	84.1
91557	37.6	4555.	6.41	99.6	87.5
91613	37.8	4569.	6.41	99.8	87.1
91629	37.8	4580.	6.35	99.9	90.2
91645	38.0	4534.	6.33	100.3	91.9
917 1	39.1	4455.	6.35	102.0	95.9
91717	38.5	4474.	6.40	101.0	89.2
91733	38.3	4503.	6.40	100.7	86.8
91749	39.0	4541.	6.50	101.6	85.2
918 5	39.1	4576.	6.52	101.8	86.0
91821	38.6	4601.	6.42	100.7	88.5
91837	38.6	4531.	6.37	101.0	92.4
91853	38.3	4501.	6.40	100.7	91.2
919 9	38.1	4506.	6.41	100.4	89.8
91925	38.0	4538.	6.42	100.2	87.2

NATURAL ICING ENCOUNTER FLIGHT 25
AIRCRAFT STATE PARAMETERS (JUN-1F 31R)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
853 1	35.8	4583.	6.59	97.3	96.4
85317	35.5	4573.	6.60	97.0	95.3
85333	36.5	4515.	6.59	98.6	101.5
85349	36.4	4503.	6.59	98.4	97.6
854 5	36.5	4466.	6.59	98.6	97.7
85421	34.1	4399.	6.29	95.0	100.5
85437	33.7	4259.	6.04	95.1	104.1
85453	32.9	4048.	6.00	94.2	105.8
855 9	35.4	3981.	6.41	98.2	100.1
85525	35.2	3948.	6.48	97.6	92.8
85541	35.1	3959.	6.48	97.4	91.7
85557	35.2	3986.	6.45	97.6	94.9
85613	34.6	3971.	6.39	96.7	94.9
85629	34.7	3966.	6.39	96.9	96.0
85645	34.8	3990.	6.39	97.1	94.9
857 1	34.5	3971.	6.39	96.5	93.3
85717	34.6	3945.	6.39	96.9	95.1
85733	35.0	3950.	6.47	97.5	93.1
85749	35.3	3961.	6.50	98.1	93.5
858 5	34.3	3964.	6.51	97.4	92.6
85821	35.0	3959.	6.51	98.0	93.1
85837	35.2	3975.	6.51	98.0	91.8
85853	35.4	3991.	6.50	98.1	91.7
859 9	35.4	4005.	6.50	98.1	91.2
85925	35.7	3968.	6.50	98.6	95.9
85941	35.9	3941.	6.50	99.1	98.5
85957	35.5	3980.	6.50	98.3	92.6
9 013	35.7	3986.	6.50	98.7	94.9
9 029	35.7	3989.	6.51	98.5	93.6
9 045	35.9	3998.	6.50	98.5	95.0
9 1 1	36.0	3975.	6.50	98.1	94.7
9 117	36.1	4002.	6.50	99.0	95.4
9 133	36.3	3986.	6.50	99.6	97.4
9 149	36.4	3943.	6.50	99.7	97.5
9 2 5	35.1	3966.	6.51	98.6	93.4
9 221	36.0	3986.	6.50	99.2	94.0
9 237	36.4	3973.	6.50	99.7	96.5
9 253	36.1	3952.	6.47	99.3	96.1
9 3 9	35.8	3971.	6.45	98.7	93.2
9 325	36.1	3977.	6.45	99.2	94.7
9 341	34.2	3980.	6.46	98.3	94.5
9 357	38.2	4059.	6.78	102.2	85.1
9 413	41.9	4240.	7.27	106.9	79.5
9 429	43.8	4376.	7.35	109.1	87.6
9 445	38.3	4452.	6.62	100.7	93.9
9 5 1	39.7	4471.	6.83	103.4	92.5
9 517	39.9	4466.	6.83	103.4	95.9
9 533	38.9	4443.	6.57	101.8	100.0
9 549	37.3	4436.	6.49	99.9	94.1
9 6 5	37.4	4466.	6.58	99.9	91.0

NATURAL ICING ENCOUNTER FLIGHT 25
AIRCRAFT STATE PARAMETERS (JUN-1M 31R)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
83941	36.8	4972.	6.60	97.5	90.4
83957	37.2	4974.	6.66	98.1	90.6
84013	36.3	4946.	6.60	97.6	90.7
84029	32.0	4903.	5.94	91.0	93.8
84045	32.5	4798.	5.81	91.6	92.7
841 1	32.0	4690.	5.81	91.5	90.9
84117	32.4	4562.	5.81	91.9	93.5
84133	32.8	4399.	5.81	92.9	97.0
84149	32.7	4270.	5.81	92.9	96.0
842 5	32.3	4153.	5.81	92.6	93.2
84221	32.0	4110.	5.81	92.3	91.9
84237	33.4	4014.	6.08	94.8	90.7
84253	36.1	4005.	6.49	98.8	86.2
843 9	36.4	4002.	6.48	99.1	91.4
84325	36.7	4000.	6.48	99.3	91.2
84341	36.1	3986.	6.49	98.5	86.7
84357	36.7	3973.	6.48	99.5	92.4
84413	36.4	4007.	6.48	99.0	90.0
84429	36.7	3993.	6.47	99.4	93.7
84445	36.2	3952.	6.42	98.8	93.8
845 1	36.1	3918.	6.42	98.8	95.6
84517	37.2	3907.	6.62	100.5	90.2
84533	39.5	4064.	6.99	103.2	78.0
84549	40.2	4300.	7.11	103.8	72.2
846 5	40.2	4515.	7.11	103.3	75.1
84621	36.7	4678.	6.62	97.7	81.0
84637	32.6	4624.	6.01	92.2	93.5
84653	33.8	4566.	6.22	94.3	88.3
847 9	33.2	4550.	6.23	93.7	86.2
84725	34.6	4492.	6.31	95.8	89.0
84741	37.2	4487.	6.63	99.4	89.2
84757	37.0	4536.	6.63	98.9	87.9
84813	37.3	4571.	6.63	99.3	90.2
84829	36.6	4566.	6.53	98.2	86.5
84845	34.6	4517.	6.33	95.6	87.3
849 1	34.2	4494.	6.33	95.1	92.2
84917	33.8	4499.	6.35	94.7	88.4
84933	35.0	4483.	6.46	96.4	90.6
84949	34.9	4457.	6.46	96.2	89.1
850 5	35.9	4464.	6.59	97.7	87.8
85021	35.9	4527.	6.60	97.5	88.9
85037	35.6	4531.	6.52	97.2	87.4
85053	35.2	4517.	6.50	96.7	86.7
851 9	34.9	4476.	6.50	96.4	85.5
85125	35.0	4498.	6.50	96.6	84.2
85141	35.4	4506.	6.59	96.8	87.3
85157	35.6	4529.	6.60	97.2	89.8
85213	35.5	4578.	6.60	96.9	88.5
85229	35.5	4606.	6.60	97.0	90.9
85245	36.2	4562.	6.59	97.9	99.4

NATURAL ICING ENCOUNTER FLIGHT 25
AIRCRAFT STATE PARAMETERS (JUNE 1F 31A)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
82621	41.3	1847.	6.96	107.5	69.4
82637	41.8	2131.	7.03	108.4	70.8
82653	41.6	2423.	7.06	107.3	70.2
827 9	41.2	2717.	7.03	106.0	67.2
82725	40.9	2977.	7.03	104.9	70.9
82741	40.1	3019.	6.89	104.3	94.4
82757	39.9	3025.	6.81	104.5	99.6
82813	40.1	3163.	6.81	103.3	85.2
82829	39.6	3417.	6.81	102.2	72.1
82845	39.4	3654.	6.81	101.4	64.2
829 1	39.6	3880.	6.87	101.3	66.5
82917	39.5	3950.	6.75	101.1	88.3
82933	34.2	3896.	6.11	93.5	93.6
82949	37.6	3893.	6.60	99.3	87.7
830 5	37.8	3943.	6.61	99.5	89.3
83021	38.0	3952.	6.61	99.8	90.6
83037	38.0	3993.	6.60	99.8	92.8
83053	37.5	3989.	6.57	99.2	93.3
831 9	38.3	3946.	6.57	100.4	100.9
83125	37.6	3982.	6.57	99.3	92.6
83141	37.4	4030.	6.57	99.1	92.1
83157	37.5	4034.	6.57	99.4	93.4
83213	37.7	3982.	6.57	99.9	96.5
83229	37.8	3932.	6.57	100.1	98.4
83245	37.2	3952.	6.57	99.2	93.9
833 1	37.4	3955.	6.58	99.7	93.7
83317	37.6	3921.	6.58	100.1	93.7
83333	37.3	3943.	6.54	100.0	97.5
83349	38.2	3909.	6.58	101.0	96.0
834 5	37.6	3964.	6.57	100.0	88.3
83421	36.3	4025.	6.57	98.8	86.7
83437	38.8	4103.	6.73	101.7	84.3
83453	42.0	4332.	7.23	105.9	88.5
835 9	43.7	4599.	7.39	107.6	89.1
83525	42.7	4887.	7.39	105.7	88.6
83541	41.9	5043.	7.34	104.6	85.2
83557	37.7	5064.	6.90	99.5	95.4
83613	37.6	5055.	6.90	99.5	96.3
83629	37.2	5052.	6.90	99.1	96.7
83645	38.6	4991.	6.90	100.7	99.0
837 1	37.2	4974.	6.90	99.4	94.6
83717	37.4	4991.	6.90	99.7	92.7
83733	39.6	4988.	6.90	101.6	95.1
83749	39.5	5021.	6.89	101.2	92.0
838 5	39.5	5047.	6.90	101.4	93.5
83821	38.1	5000.	6.64	99.4	97.2
83837	37.3	4967.	6.59	98.4	94.8
83853	37.3	4951.	6.59	98.1	93.2
839 9	36.0	4965.	6.60	96.9	90.1
83925	36.7	4977.	6.60	97.3	90.0

NATURAL ICING ENCOUNTER FLIGHT 25
AIRCRAFT STATE PARAMETERS (JUN=1H 318)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
813 1	17.7	594.	2.13	71.5	4.4
81317	14.5	619.	.27	67.4	4.5
81333	14.6	619.	.27	66.9	4.8
81349	14.6	617.	.27	66.7	4.5
814 5	14.6	616.	.27	67.8	4.4
81421	14.8	614.	.27	67.7	4.1
81437	14.8	619.	.27	67.6	4.4
81453	15.0	617.	.27	67.8	4.7
815 0	14.8	619.	.27	67.1	4.4
81525	14.7	617.	.27	67.7	4.5
81541	14.6	617.	.27	67.2	5.1
81557	14.4	619.	.27	66.6	4.8
81613	13.5	619.	.27	65.5	4.4
81629	14.7	617.	.27	67.3	4.8
81645	14.7	616.	.27	67.0	4.5
817 1	22.2	566.	3.56	82.1	3.7
81717	36.5	567.	6.19	100.3	4.0
81733	36.3	581.	6.18	99.8	2.9
81749	37.8	579.	6.18	100.7	5.1
818 5	37.6	575.	6.21	101.0	3.8
81821	32.8	565.	5.41	92.5	3.8
81837	14.7	619.	.38	65.0	4.9
81853	13.9	619.	.27	66.2	4.8
819 9	13.8	617.	.27	66.4	4.7
81925	13.7	619.	.27	65.5	4.5
81941	13.7	621.	.27	66.1	4.9
81957	13.6	619.	.27	65.9	4.7
82013	13.3	621.	.27	64.1	5.3
82029	13.4	619.	.27	65.2	4.8
82045	13.5	619.	.28	65.8	4.8
821 1	13.5	619.	.28	66.7	5.6
82117	11.3	617.	.27	57.9	5.0
82133	9.0	619.	.27	52.0	5.0
82149	9.8	619.	.27	52.4	4.6
822 5	9.8	619.	.27	53.2	5.0
82221	9.8	619.	.27	52.4	5.3
82237	9.8	619.	.27	52.8	5.5
82253	9.8	621.	.27	53.4	4.8
823 3	9.8	621.	.27	52.4	4.8
82325	9.8	619.	.27	53.1	5.7
82341	9.8	619.	.27	53.8	5.8
82357	9.9	619.	.27	55.9	6.6
82413	11.9	619.	.26	60.6	6.4
82429	17.3	602.	2.24	74.5	4.4
82445	36.0	575.	6.19	100.9	13.0
825 1	38.5	668.	6.43	102.7	53.0
82517	40.0	819.	6.71	105.7	46.2
82533	40.9	1037.	6.89	106.6	24.7
82549	41.4	1314.	6.90	106.1	24.2
826 5	40.7	1561.	6.90	104.9	74.4

NATURAL ICING ENCOUNTER)

0/ 0/ 0
TAPE # 124
FLIGHT # 26
SAMPLE TIME 1150: 7

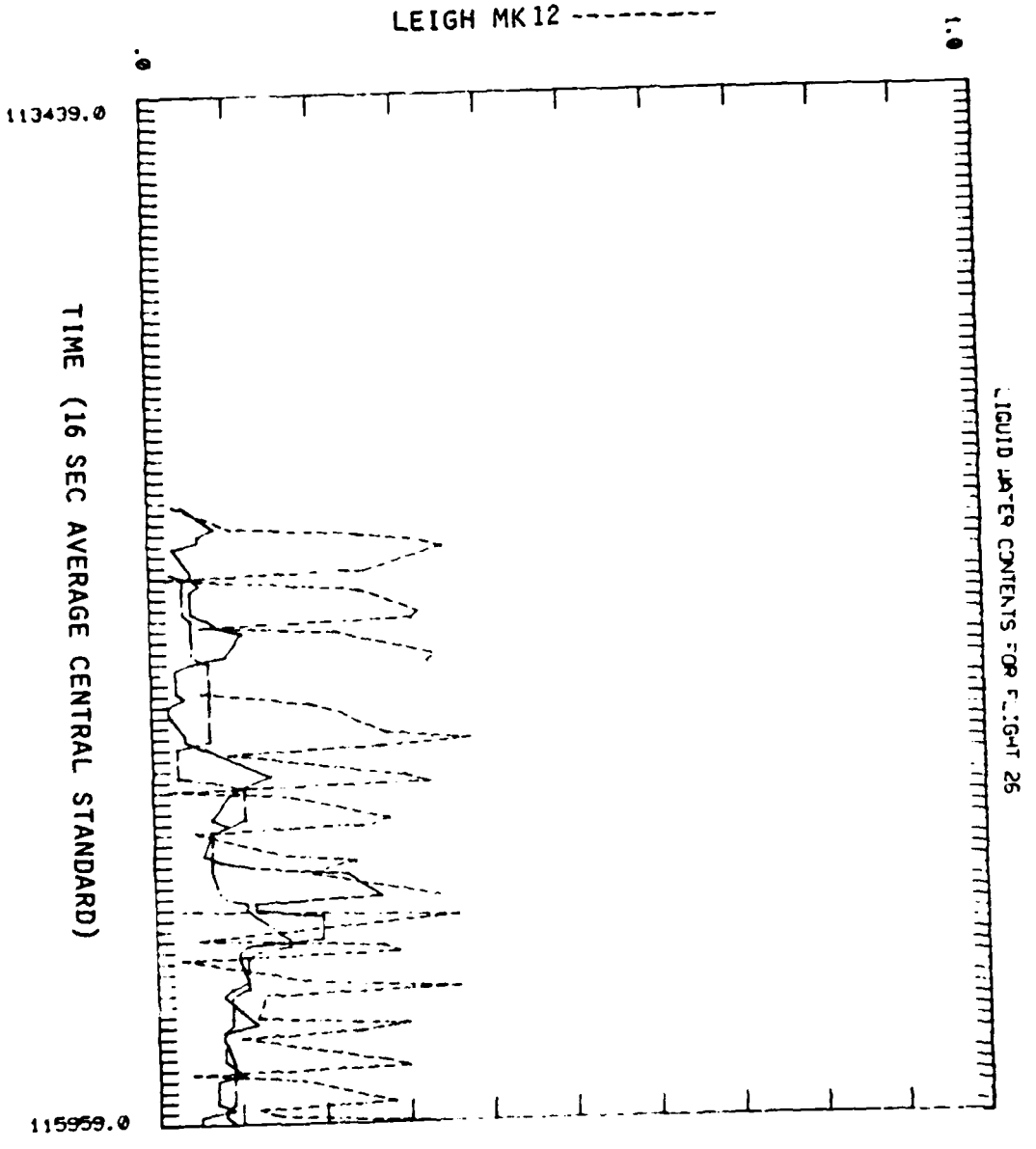
DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.709E+08	.236E+08	.100E-02	.334E-03	1.	1.
6	.511E+08	.170E+08	.578E-02	.193E-02	4.	5.
9	.893E+08	.298E+08	.341E-01	.114E-01	23.	28.
12	.807E+08	.269E+08	.730E-01	.243E-01	50.	78.
15	.144E+08	.481E+07	.255E-01	.851E-02	18.	96.
18	.118E+07	.395E+06	.362E-02	.121E-02	2.	98.
21	.474E+06	.158E+06	.230E-02	.765E-03	2.	100.
24	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
27	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
30	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
33	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
36	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
39	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
42	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
45	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
60	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
80	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
100	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
120	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
140	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
160	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
180	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

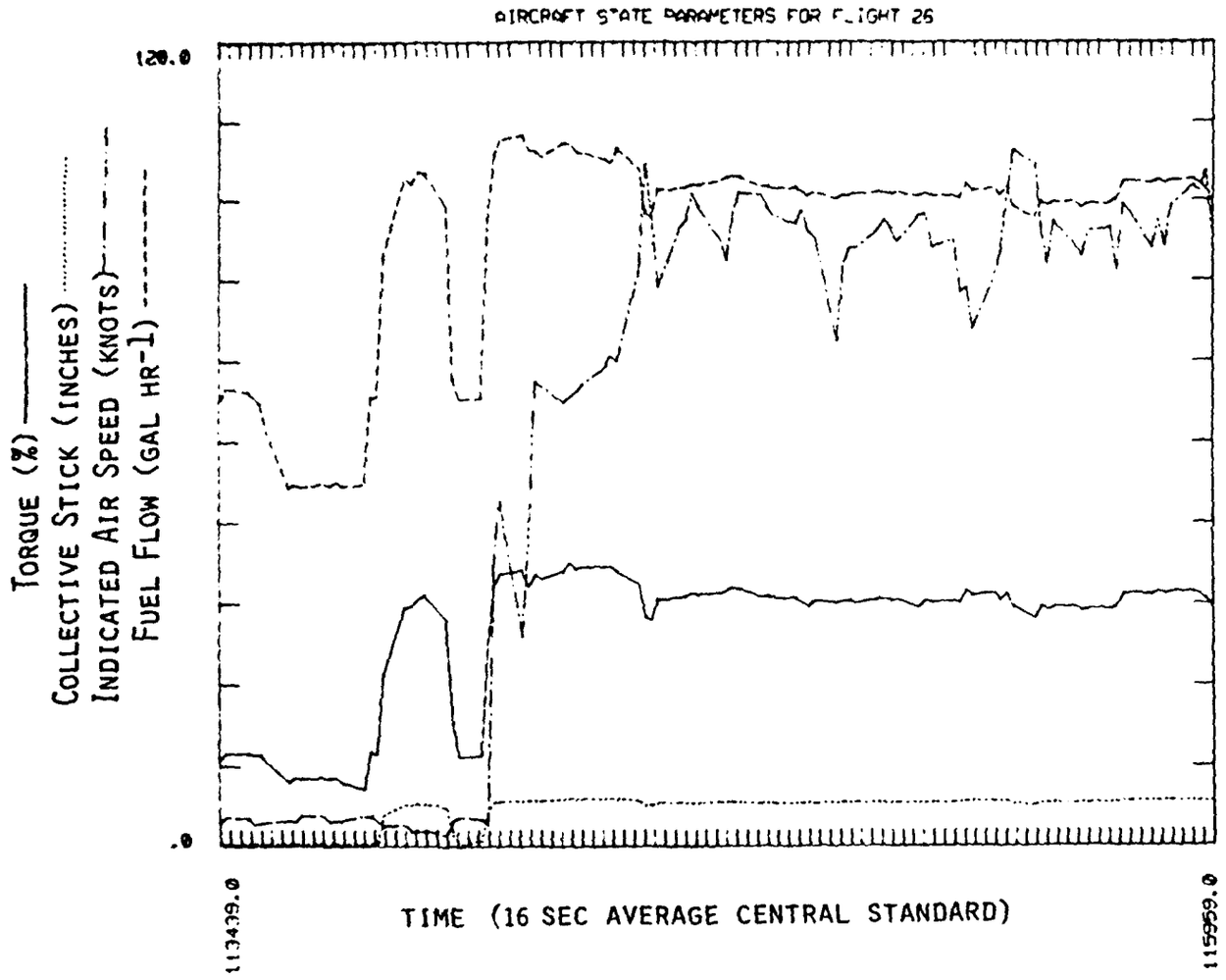
ASP LWC(GM-3)= .145 CPS LWC(GM-3)= .001

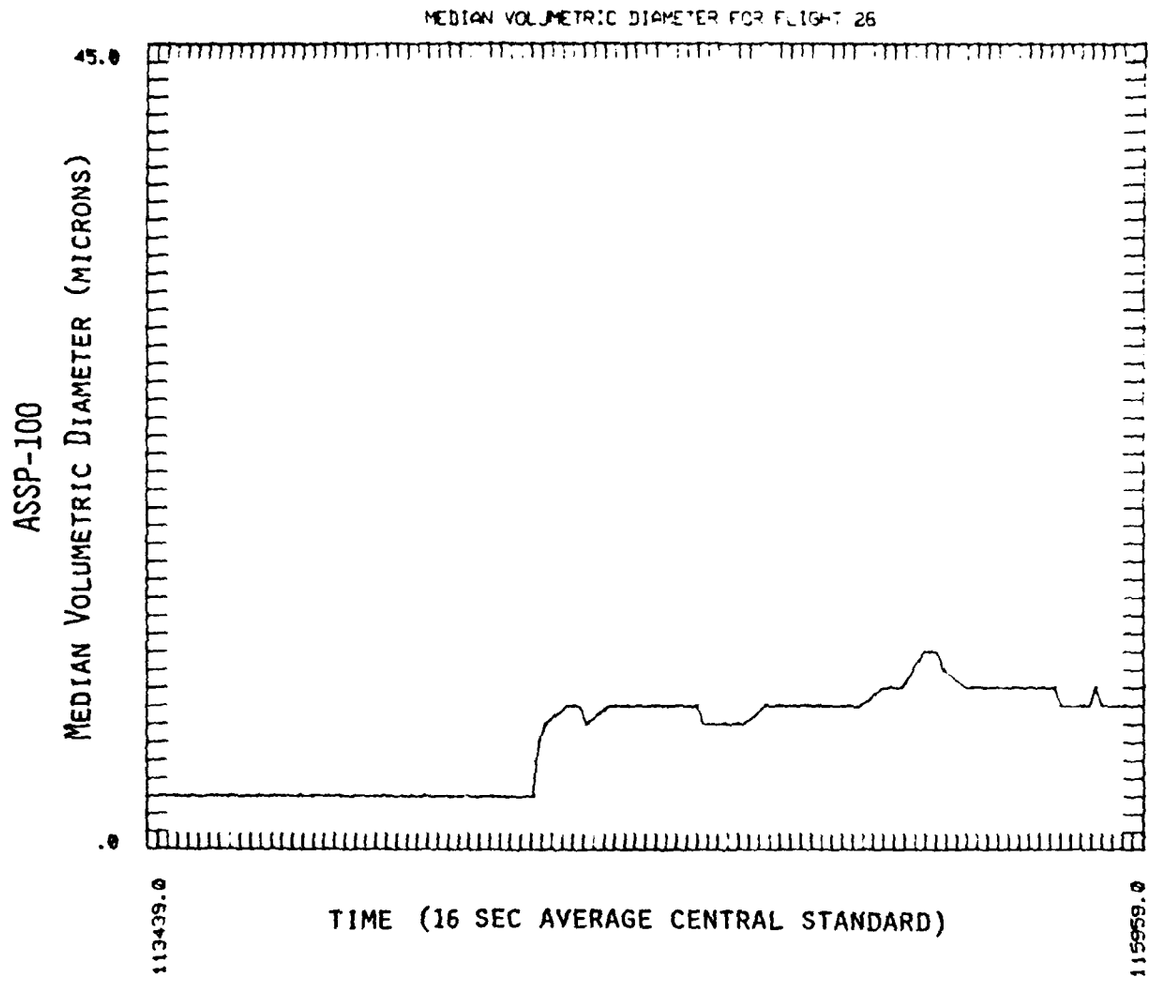
ASP COUNTS(CC-1)= 308. CPS COUNTS(LIT-1)= 0.

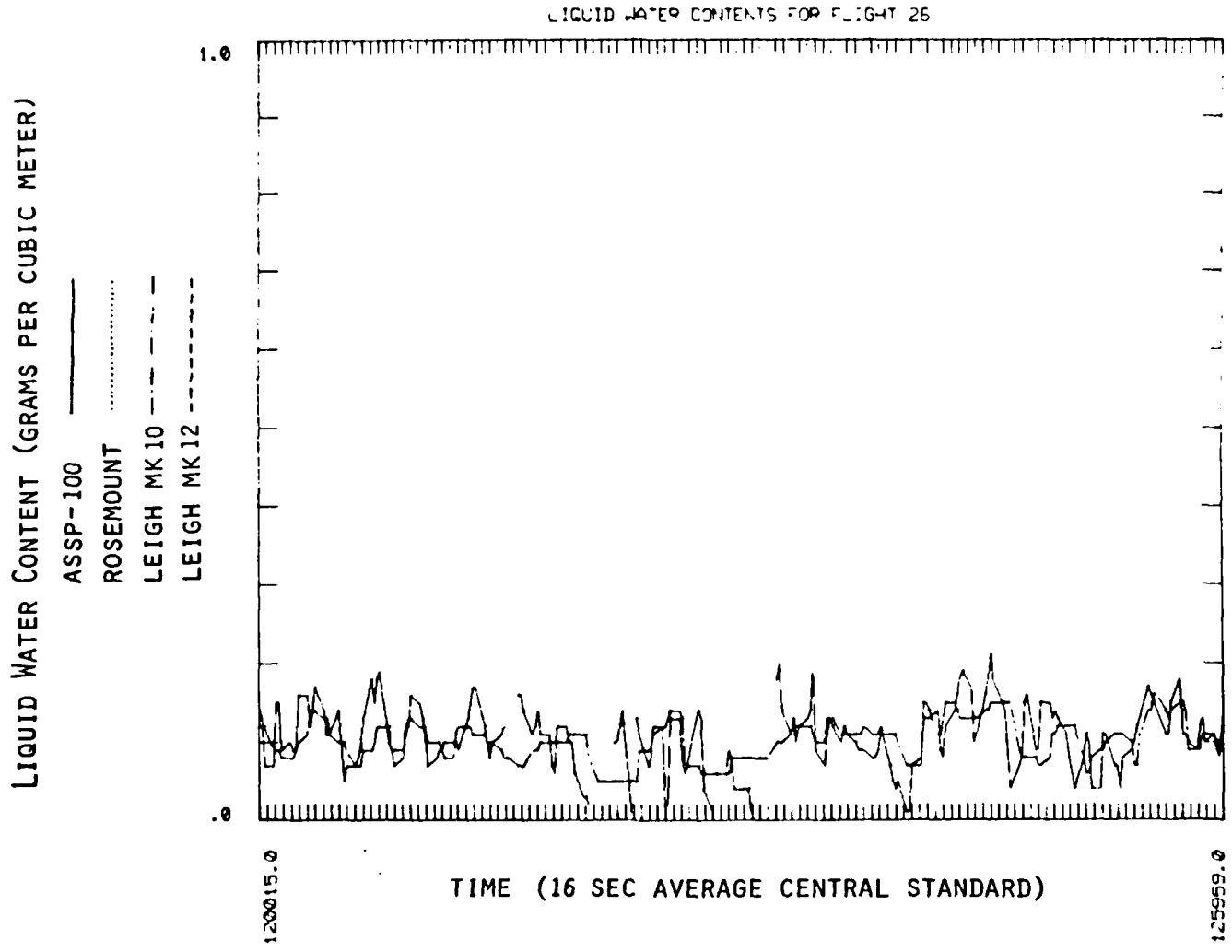
.15 GRAMS PER CUBIC METER @ 12. MICRONS MEDIAN VOLUMETRIC DIAMETER

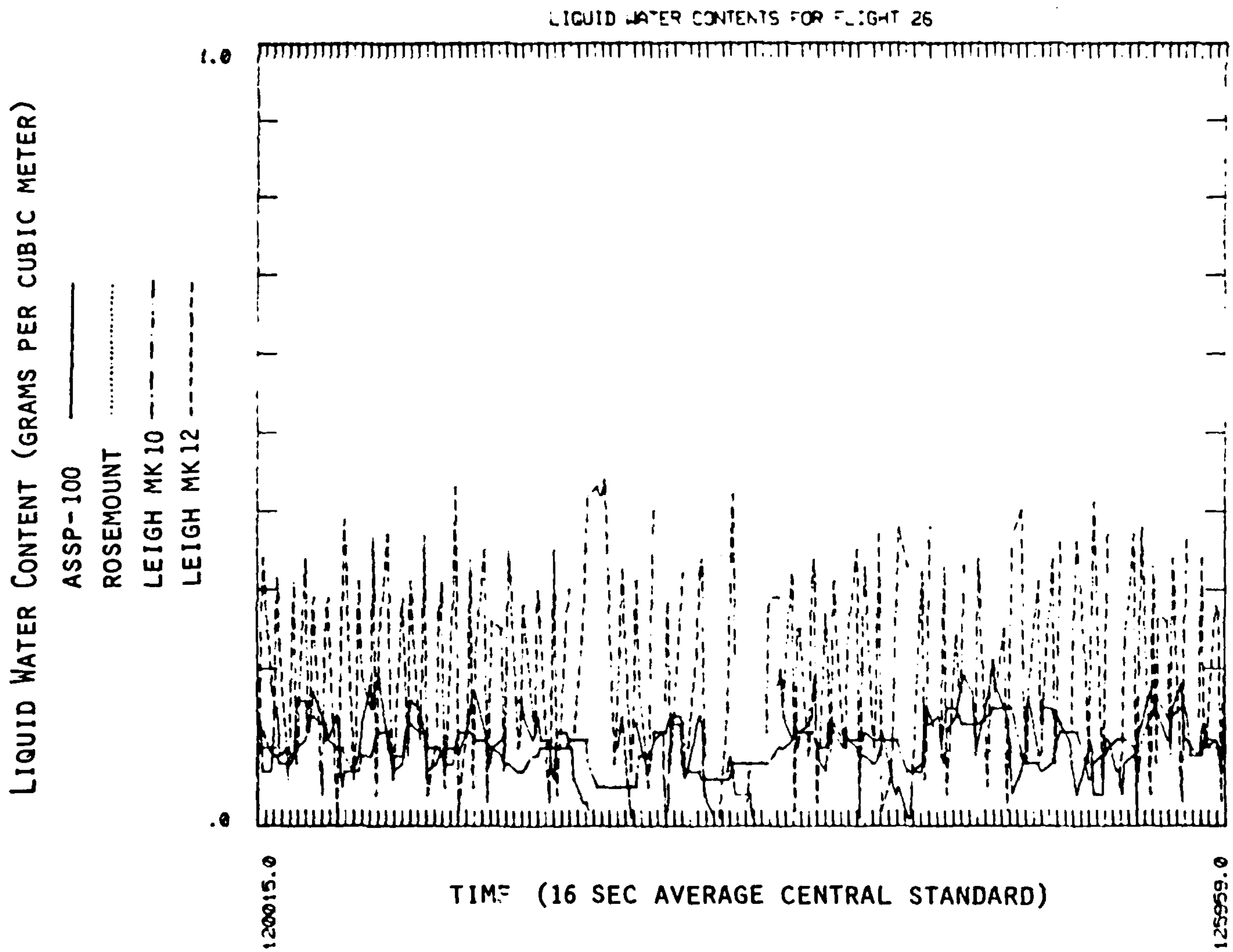
METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE


LIQUID WATER CONTENT (GRAMS PER CUBIC METER)
ASSP-100
ROSEMOUNT
LEIGH MK10
LEIGH MK12
0
1.0
113439.0
115959.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)
LIQUID WATER CONTENTS FOR FLIGHT 26


AIRCRAFT STATE PARAMETERS FOR FLIGHT 26
120.0
.0
TORQUE (%)
COLLECTIVE STICK (INCHES)
INDICATED AIR SPEED (KNOTS)
FUEL FLOW (GAL HR-1)
113439.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)
115959.0


MEDIAN VOLUMETRIC DIAMETER FOR FLIGHT 26
45.0
.0
ASSP-100
MEDIAN VOLUMETRIC DIAMETER (MICRONS)
113439.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)
115959.0


LIQUID WATER CONTENTS FOR FLIGHT 26
LIQUID WATER CONTENT (GRAMS PER CUBIC METER)
ASSP-100
ROSEMOUNT
LEIGH MK10
LEIGH MK12
1.0
.0
120015.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)
125959.0


LIQUID WATER CONTENTS FOR FLIGHT 26
1.0
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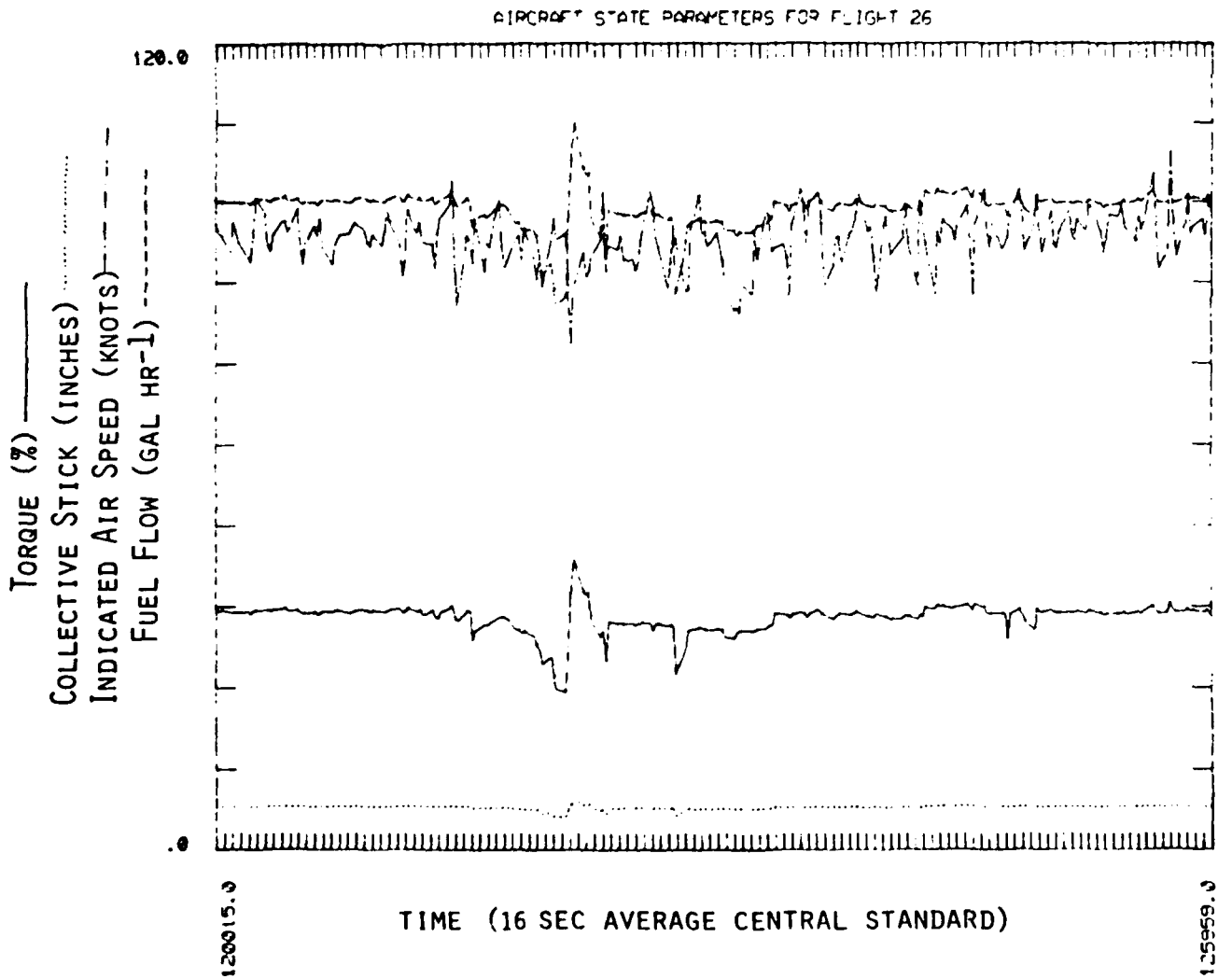
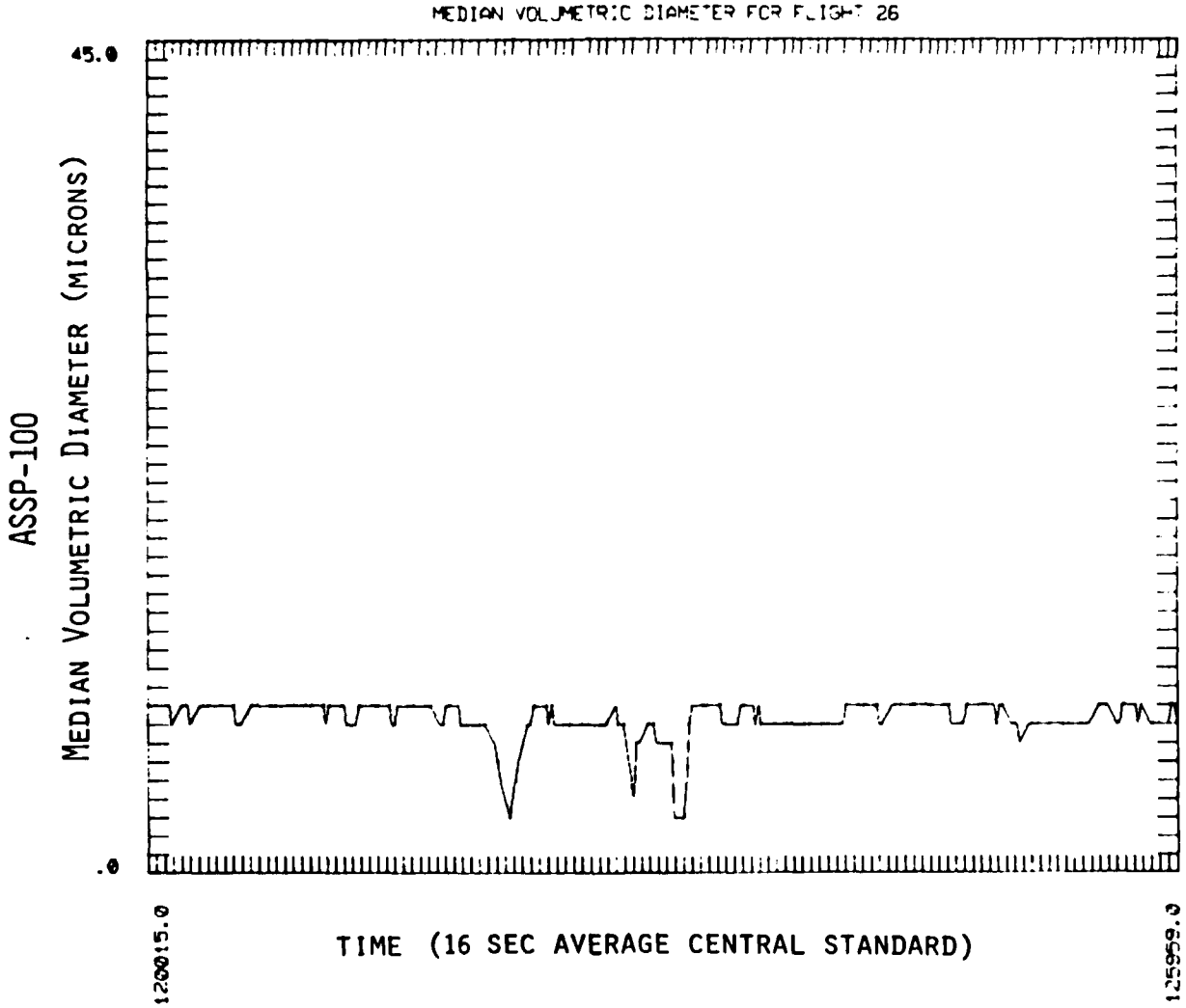
120015.0
125959.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)
LIQUID WATER CONTENT (GRAMS PER CUBIC METER)
ASSP-100
ROSEMOUNT
LEIGH MK 10
LEIGH MK 12


AIRCRAFT STATE PARAMETERS FOR FLIGHT 26
120.0
.0
TORQUE (%)
COLLECTIVE STICK (INCHES)
INDICATED AIR SPEED (KNOTS)
FUEL FLOW (GAL HR-1)
120015.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)
125959.0


MEDIAN VOLUMETRIC DIAMETER FOR FLIGHT 26
45.0
.0
ASSP-100
MEDIAN VOLUMETRIC DIAMETER (MICRONS)
120015.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)
125959.0

DATE: 3/24/80 NATURAL ICING ENCOUNTER FLIGHT 26 TAPE RECORD # 1

TIME (LST)	IRU (CNTS)	MK 10 (G/M3)	MK 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
113439	0.	.00	.00	18.5	0.00	.00	3	4.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
113455	0.	.00	0.00	52.5	0.00	.00	3	4.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
113511	0.	.00	0.00	39.4	0.00	.00	3	6.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
113527	0.	.00	0.00	52.3	0.00	.00	3	6.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
113543	0.	.00	0.00	71.6	0.00	.00	3	6.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
113559	0.	.00	0.00	72.1	0.00	.00	3	6.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
113615	0.	.00	0.00	72.1	0.00	.00	3	10.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
113631	0.	.00	0.00	72.1	0.00	.00	3	10.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
113647	0.	.00	0.00	72.1	0.00	.00	3	8.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1137 3	0.	.00	0.00	72.1	0.00	.00	3	8.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
113719	0.	.00	0.00	72.1	0.00	.00	3	12.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
113735	0.	.00	0.00	72.2	0.00	.00	3	12.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
113751	0.	.00	0.00	72.2	0.00	.00	3	12.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1138 7	0.	.00	0.00	72.1	0.00	.00	3	12.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
113823	0.	.00	0.00	72.2	0.00	.00	3	12.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
113839	0.	.00	0.00	72.2	0.00	.00	3	12.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
113855	0.	.00	0.00	72.2	0.00	.00	3	13.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
113911	0.	.00	0.00	72.2	0.00	.00	3	13.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
113927	0.	.00	0.00	72.2	0.00	.00	3	12.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
113943	0.	.00	0.00	72.2	0.00	.00	3	12.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
113959	0.	.00	0.00	72.2	0.00	.00	3	12.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114015	0.	.00	0.00	72.1	0.00	.00	3	12.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114031	0.	.00	0.00	72.2	0.00	.00	3	13.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114047	0.	.00	0.00	72.2	0.00	.00	3	13.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1141 3	0.	.00	0.00	72.2	0.00	.00	3	13.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114119	0.	.00	0.00	72.2	0.00	.00	3	13.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114135	0.	.00	0.00	55.4	0.00	.00	3	12.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114151	0.	.00	0.00	16.7	0.00	.00	3	12.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1142 7	0.	.00	0.00	7.6	0.00	.00	3	12.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114223	0.	.00	0.00	4.4	0.00	.00	3	12.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114239	0.	.00	0.00	3.0	0.00	.00	3	12.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114255	0.	.00	0.00	1.9	0.00	.00	3	12.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114311	0.	.00	0.00	1.1	0.00	.00	3	12.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114327	0.	.00	0.00	.1	0.00	.00	3	12.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114343	0.	.00	0.00	-.7	0.00	.00	3	12.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114359	0.	.00	0.00	-1.4	0.00	.00	3	12.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114415	0.	.00	0.00	-2.2	0.00	.00	3	10.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114431	0.	.00	0.00	-2.9	0.00	.00	6	10.	14	61	22	1	0	0	0	0	0	0	0	0	0	0	0
114447	0.	.00	.03	-3.8	0.00	.04	7	389.	8	35	48	7	0	0	0	0	0	0	0	0	0	0	0
1145 3	0.	.00	.10	-4.6	0.00	.08	8	389.	1	22	61	13	1	0	0	0	0	0	0	0	0	0	0
114519	0.	.00	.25	-5.0	0.00	.06	8	462.	5	34	52	7	0	0	0	0	0	0	0	0	0	0	0
114535	0.	.00	.32	-5.1	0.00	.06	8	462.	5	29	55	9	0	0	0	0	0	0	0	0	0	0	0
114551	0.	.00	.35	-5.0	0.00	.03	7	518.	9	35	48	6	0	0	0	0	0	0	0	0	0	0	0
1146 7	5.	.02	.26	-5.1	0.00	.05	8	318.	3	27	57	10	0	0	0	0	0	0	0	0	0	0	0
114623	12.	.04	.02	-5.2	0.00	.05	8	367.	4	34	52	9	0	0	0	0	0	0	0	0	0	0	0
114639	12.	.04	.14	-5.2	0.00	.06	8	367.	3	28	57	9	0	0	0	0	0	0	0	0	0	0	0
114655	12.	.04	.25	-5.2	0.00	.05	8	405.	5	35	49	8	0	0	0	0	0	0	0	0	0	0	0
114711	12.	.04	.32	-5.2	0.00	.05	8	405.	5	33	51	9	0	0	0	0	0	0	0	0	0	0	0
114727	21.	.05	.31	-5.2	0.00	.07	8	400.	2	25	56	14	1	0	0	0	0	0	0	0	0	0	0
114743	30.	.05	.06	-5.2	0.00	.08	8	400.	1	25	58	12	1	0	0	0	0	0	0	0	0	0	0

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TIME (LST)	IRU (CNTS)	MR 10 (G/M3)	MR 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MIC)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
114759	30.	.05	.22	-5.3	0.00	.11	8	606.	2	25	58	12	0	0	0	0	0	0	0	0	0	0	0
114815	30.	.05	.34	-5.4	0.00	.09	8	606.	3	30	55	9	0	0	0	0	0	0	0	0	0	0	0
114831	45.	.07	.33	-5.4	0.00	.05	8	363.	4	29	56	8	0	0	0	0	0	0	0	0	0	0	0
114847	51.	.07	0.00	-5.4	0.00	.03	7	363.	8	38	45	7	0	0	0	0	0	0	0	0	0	0	0
1149 3	51.	.07	.06	-5.4	0.00	.03	7	404.	9	43	39	6	0	0	0	0	0	0	0	0	0	0	0
114919	51.	.07	.13	-5.3	0.00	.04	7	404.	9	38	45	6	0	0	0	0	0	0	0	0	0	0	0
114935	51.	.07	.19	-5.4	0.00	.02	7	249.	15	39	37	6	0	0	0	0	0	0	0	0	0	0	0
114951	51.	.07	.22	-5.3	0.00	.02	7	249.	12	33	41	11	1	0	0	0	0	0	0	0	0	0	0
1150 7	51.	.07	.28	-5.0	0.00	.04	8	226.	2	25	53	15	2	0	0	0	0	0	0	0	0	0	0
115023	51.	.07	.38	-5.4	0.00	.04	8	226.	2	25	53	15	1	0	0	0	0	0	0	0	0	0	0
115039	61.	.03	.27	-5.5	0.00	.06	8	377.	3	28	53	13	1	0	0	0	0	0	0	0	0	0	0
115055	61.	.03	.09	-5.6	0.00	.08	8	377.	1	26	54	15	1	0	0	0	0	0	0	0	0	0	0
115111	61.	.03	.30	-5.8	0.00	.14	8	633.	1	23	56	17	1	0	0	0	0	0	0	0	0	0	0
115127	80.	.09	.33	-5.9	0.00	.12	8	633.	2	21	55	17	2	0	0	0	0	0	0	0	0	0	0
115143	89.	.11	.02	-5.9	0.00	.10	8	506.	1	23	58	14	1	0	0	0	0	0	0	0	0	0	0
115159	89.	.11	.16	-5.9	0.00	.09	8	506.	2	23	54	16	1	0	0	0	0	0	0	0	0	0	0
115215	89.	.11	.28	-5.9	0.00	.07	8	422.	2	24	55	15	1	0	0	0	0	0	0	0	0	0	0
115231	97.	.09	.26	-5.8	0.00	.09	8	422.	1	27	54	15	1	0	0	0	0	0	0	0	0	0	0
115247	115.	.07	.05	-6.0	0.00	.07	8	388.	3	21	51	19	2	0	0	0	0	0	0	0	0	0	0
1153 3	115.	.07	.15	-6.1	0.00	.06	9	388.	4	22	46	22	4	0	0	0	0	0	0	0	0	0	0
115319	115.	.07	.24	-6.1	0.00	.08	9	325.	1	13	48	28	6	0	0	0	0	0	0	0	0	0	0
115335	122.	.07	.21	-6.2	0.00	.12	9	325.	0	6	53	31	6	0	1	0	0	0	0	0	0	0	0
115351	135.	.07	.19	-6.0	0.00	.23	9	581.	0	5	56	29	6	0	1	0	0	0	0	0	0	0	0
1154 7	137.	.08	.34	-6.5	0.00	.27	11	581.	0	4	29	47	14	2	1	0	0	0	0	0	0	0	0
115423	154.	.11	0.00	-4.4	0.00	.12	11	259.	0	4	27	50	15	1	0	0	0	0	0	0	0	0	0
115439	154.	.11	.03	-5.8	0.00	.12	11	259.	0	5	37	42	11	1	2	0	0	0	0	0	0	0	0
115455	156.	.12	.36	-6.7	0.00	.20	10	580.	0	8	47	34	7	0	1	0	0	0	0	0	0	0	0
115511	194.	.16	.05	-6.5	0.00	.20	9	580.	0	7	54	29	5	0	1	0	0	0	0	0	0	0	0
115527	194.	.16	.27	-6.5	0.00	.11	9	388.	1	11	53	28	4	0	0	0	0	0	0	0	0	0	0
115543	207.	.12	.29	-6.5	0.00	.10	9	388.	1	13	50	28	5	0	0	0	0	0	0	0	0	0	0
115559	214.	.11	.03	-6.3	0.00	.10	9	437.	1	18	54	21	2	0	0	0	0	0	0	1	0	0	0
115615	214.	.11	.19	-6.4	0.00	.11	9	437.	1	15	52	26	4	0	0	0	0	0	0	0	0	0	0
115631	214.	.11	.36	-6.4	0.00	.09	9	341.	1	14	54	25	3	0	0	0	0	0	0	0	0	0	0
115647	237.	.09	.13	-6.3	0.00	.08	9	341.	1	18	57	20	2	0	0	0	0	0	0	0	0	0	0
1157 3	240.	.09	.12	-6.3	0.00	.11	9	450.	1	16	57	21	2	0	0	0	0	0	0	0	0	0	0
115719	240.	.09	.30	-6.4	0.00	.12	9	450.	1	14	57	23	2	0	0	0	0	0	0	0	0	0	0
115735	250.	.08	.24	-6.3	0.00	.08	9	339.	0	17	57	20	2	0	0	0	0	0	0	0	0	0	0
115751	261.	.08	.10	-6.3	0.00	.08	8	339.	0	21	58	16	1	0	0	0	0	0	0	0	0	0	0
1158 7	262.	.08	.27	-6.4	0.00	.09	8	418.	1	20	58	17	1	0	0	0	0	0	0	0	0	0	0
115823	271.	.09	.30	-6.4	0.00	.09	8	418.	1	21	58	16	1	0	0	0	0	0	0	0	0	0	0
115839	283.	.09	.04	-6.6	0.00	.10	9	420.	1	18	56	20	2	0	0	0	0	0	0	0	0	0	0
115855	283.	.09	.17	-6.7	0.00	.07	8	420.	3	24	53	16	2	0	0	0	0	0	0	0	0	0	0
115911	283.	.09	.28	-6.6	0.00	.07	8	421.	2	32	52	11	1	0	0	0	0	0	0	0	0	0	0
115927	302.	.08	.12	-6.7	0.00	.09	8	421.	1	24	55	16	1	0	0	0	0	0	0	0	0	0	0
115943	307.	.08	.14	-6.6	0.00	.05	8	225.	1	22	55	17	2	0	0	0	0	0	0	0	0	0	0
115959	310.	.09	.32	-6.5	0.00	.05	8	225.	0	26	55	15	1	0	0	0	0	0	0	0	0	0	0
12 015	331.	.12	.02	-6.6	0.00	.14	9	597.	1	19	55	20	2	0	0	0	0	0	0	0	0	0	0
12 031	331.	.12	.18	-6.6	0.00	.13	9	597.	1	22	52	19	3	0	0	0	0	0	0	0	0	0	0
12 047	331.	.12	.34	-6.7	0.00	.07	9	294.	1	21	52	20	3	0	0	0	0	0	0	0	0	0	0
12 1 3	352.	.09	.18	-6.7	0.00	.07	9	294.	0	18	56	19	2	0	0	0	0	0	0	0	0	0	0

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TIME (LST)	TRU (CNTS)	MK 10 (G/M3)	MK 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
12 119	355.	.09	.15	-6.6	0.00	.15	9	621.	0	20	55	19	2	0	0	0	0	0	0	0	0	0	0
12 135	355.	.09	.32	-6.6	0.00	.15	9	621.	1	18	55	20	3	0	0	0	0	0	0	0	0	0	0
12 151	365.	.08	.23	-6.5	0.00	.09	8	433.	2	21	54	18	2	0	0	0	0	0	0	0	0	0	0
12 2 7	375.	.08	.06	-6.6	0.00	.10	9	433.	1	18	54	21	3	0	0	0	0	0	0	0	0	0	0
12 223	375.	.08	.18	-6.6	0.00	.09	9	338.	1	16	55	22	3	0	0	0	0	0	0	0	0	0	0
12 239	378.	.09	.31	-6.7	0.00	.09	9	338.	0	16	56	21	3	0	0	0	0	0	0	0	0	0	0
12 255	402.	.10	.08	-6.6	0.00	.16	8	654.	0	21	57	17	1	0	0	0	0	0	0	0	0	0	0
12 311	403.	.11	.30	-6.7	0.00	.16	9	654.	1	18	57	19	2	0	0	0	0	0	0	0	0	0	0
12 327	424.	.14	.15	-6.7	0.00	.12	9	411.	0	12	55	26	4	0	0	0	0	0	0	0	0	0	0
12 343	424.	.14	.16	-6.7	0.00	.14	9	411.	0	8	55	29	4	0	1	0	0	0	0	0	0	0	0
12 359	433.	.14	.29	-6.7	0.00	.17	9	535.	0	9	54	28	4	0	1	0	0	0	0	0	0	0	0
12 415	454.	.13	.04	-6.7	0.00	.14	9	535.	0	13	56	24	3	0	0	0	0	0	0	0	0	0	0
12 431	454.	.13	.23	-6.8	0.00	.11	9	413.	0	16	56	22	2	0	0	0	0	0	0	0	0	0	0
12 447	463.	.11	.29	-6.7	0.00	.11	9	413.	0	16	57	21	2	0	0	0	0	0	0	0	0	0	0
12 5 3	476.	.10	.02	-6.7	0.00	.14	9	593.	1	19	56	18	2	0	0	0	0	0	0	0	0	0	0
12 519	476.	.10	.12	-6.7	0.00	.10	8	593.	2	23	54	16	1	0	0	0	0	0	0	0	0	0	0
12 535	476.	.10	.27	-6.7	0.00	.05	8	355.	3	26	53	14	1	0	0	0	0	0	0	0	0	0	0
12 551	479.	.09	.39	-6.6	0.00	.07	8	355.	2	20	55	18	2	0	0	0	0	0	0	0	0	0	0
12 6 7	499.	.07	.06	-6.7	0.00	.07	9	283.	1	16	56	20	3	0	0	0	0	0	0	0	0	0	0
12 623	499.	.07	.12	-6.5	0.00	.08	9	283.	0	13	57	23	3	0	1	0	0	0	0	0	0	0	0
12 639	499.	.07	.31	-6.5	0.00	.09	9	415.	1	19	57	18	2	0	0	0	0	0	0	0	0	0	0
12 655	518.	.09	.19	-6.5	0.00	.13	9	415.	0	11	56	26	3	0	1	0	0	0	0	0	0	0	0
12 711	523.	.09	.15	-6.6	0.00	.18	9	587.	0	11	55	26	3	0	1	0	0	0	0	0	0	0	0
12 727	525.	.10	.37	-6.6	0.00	.15	9	587.	0	16	56	21	2	0	0	0	0	0	0	0	0	0	0
12 743	549.	.12	.04	-6.6	0.00	.18	9	617.	0	12	56	25	3	0	1	0	0	0	0	0	0	0	0
12 759	549.	.12	.23	-6.6	0.00	.19	9	617.	0	11	55	26	4	0	0	0	0	0	0	0	0	0	0
12 815	549.	.12	.37	-6.6	0.00	.10	9	373.	0	13	55	24	3	0	0	0	0	0	0	0	0	0	0
12 831	570.	.09	.13	-6.5	0.00	.09	9	373.	1	16	56	22	3	0	0	0	0	0	0	0	0	0	0
12 847	571.	.09	.06	-6.5	0.00	.07	9	302.	1	16	58	20	2	0	0	0	0	0	0	0	0	0	0
12 9 3	571.	.09	.29	-6.4	0.00	.08	9	302.	0	15	57	22	2	0	0	0	0	0	0	0	0	0	0
12 919	580.	.12	.20	-6.5	0.00	.11	9	455.	1	16	57	21	2	0	0	0	0	0	0	0	0	0	0
12 935	585.	.13	.09	-6.5	0.00	.12	9	455.	0	15	56	22	2	0	0	0	0	0	0	0	0	0	0
12 951	585.	.13	.31	-6.4	0.00	.16	9	526.	0	11	57	24	3	0	1	0	0	0	0	0	0	0	0
1210 7	607.	.12	.11	-6.4	0.00	.15	9	526.	0	13	56	23	3	0	0	0	0	0	0	0	0	0	0
121023	610.	.12	.19	-6.5	0.00	.13	9	524.	1	19	57	19	2	0	0	0	0	0	0	0	0	0	0
121039	611.	.12	.37	-6.5	0.00	.11	8	524.	1	20	59	16	1	0	0	0	0	0	0	0	0	0	0
121055	632.	.10	.04	-6.5	0.00	.07	9	330.	1	16	52	23	4	0	0	0	0	0	0	0	0	0	0
121111	632.	.10	.11	-6.4	0.00	.08	9	330.	1	17	54	21	3	0	0	0	0	0	0	0	0	0	0
121127	632.	.10	.27	-6.5	0.00	.09	9	319.	1	13	51	27	5	0	0	0	0	0	0	0	0	0	0
121143	635.	.09	.31	-6.5	0.00	.09	9	319.	0	13	52	26	5	0	0	0	0	0	0	0	0	0	0
121159	645.	.08	.05	-6.3	0.00	.10	8	445.	0	22	53	18	2	0	0	0	0	0	0	0	0	0	0
121215	646.	.08	.29	-6.4	0.00	.10	8	445.	1	28	51	17	2	0	0	0	0	0	0	0	0	0	0
121231	663.	.11	.43	-6.4	0.00	.10	9	380.	1	16	54	23	4	0	0	0	0	0	0	0	0	0	0
121247	671.	.12	.02	-6.4	0.00	.09	9	380.	1	18	55	20	2	0	0	0	0	0	0	0	0	0	0
1213 3	671.	.12	.14	-6.3	0.00	.13	9	537.	1	17	57	20	2	0	0	0	0	0	0	0	0	0	0
121319	671.	.12	.34	-6.3	0.00	.15	9	537.	0	14	57	22	2	0	0	0	0	0	0	0	0	0	0
121335	700.	.11	.05	-6.3	0.00	.17	9	638.	0	15	59	20	2	0	0	0	0	0	0	0	0	0	0
121351	702.	.11	.22	-6.3	0.00	.17	9	638.	1	14	56	23	3	0	0	0	0	0	0	0	0	0	0
1214 7	706.	.11	.35	-6.3	0.00	.12	9	476.	1	15	55	23	4	0	0	0	0	0	0	0	0	0	0
121423	723.	.10	.03	-6.2	0.00	.10	8	496.	1	22	54	18	2	0	0	0	0	0	0	0	0	0	0

DATE: 3/20/80 NATURAL ICING ENCOUNTER FLIGHT 26 TAPE RECORD # 76

TIME (LST)	IRU (CNTS)	MK 10 (G/M3)	MK 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
121439	723.	.10	.16	-6.2	0.00	.08	8	370.	1	21	53	18	3	0	0	0	0	0	0	0	0	0	0
121455	723.	.10	.26	-6.3	0.00	.10	9	370.	0	15	54	23	3	0	0	0	0	0	0	0	0	0	0
121511	734.	.09	.25	-6.2	0.00	.11	9	449.	0	20	55	19	2	0	0	0	0	0	0	0	0	0	0
121527	746.	.08	.07	-6.2	0.00	.12	9	449.	0	17	56	21	2	0	0	0	0	0	0	0	0	0	0
121543	746.	.08	.20	-6.0	0.00	.00	9	1.	0	10	53	29	5	0	0	0	0	0	0	0	0	0	0
121559	746.	.08	.35	-6.1	0.00	.00	9	1.	0	16	54	23	3	0	0	0	0	0	0	0	0	0	0
121615	762.	.07	.10	-6.2	0.00	.16	9	531.	0	11	54	27	4	0	0	0	0	0	0	0	0	0	0
121631	764.	.07	.13	-6.0	0.00	.16	9	531.	0	12	56	24	3	0	1	0	0	0	0	0	0	0	0
121647	764.	.07	.28	-5.8	0.00	.14	9	531.	0	16	56	22	2	0	0	0	0	0	0	0	0	0	0
1217 3	779.	.09	.15	-5.6	0.00	.11	8	531.	1	24	55	15	1	0	0	0	0	0	0	0	0	0	0
121719	786.	.09	.12	-5.5	0.00	.12	8	575.	1	25	56	14	1	0	0	0	0	0	0	0	0	0	0
121735	786.	.09	.30	-5.4	0.00	.14	9	575.	0	18	57	19	2	0	0	0	0	0	0	0	0	0	0
121751	803.	.10	.26	-5.4	0.00	.11	9	466.	1	18	56	19	2	0	0	0	0	0	0	0	0	0	0
1218 7	808.	.10	.03	-5.2	0.00	.11	9	466.	1	19	55	19	2	0	0	0	0	0	0	0	0	0	0
121823	808.	.10	.17	-5.2	0.00	.07	8	340.	1	26	54	14	1	0	0	0	0	0	0	0	0	0	0
121839	811.	.10	.35	-5.1	0.00	.06	8	340.	1	34	51	11	0	0	0	0	0	0	0	0	0	0	0
121855	834.	.10	.04	-5.1	0.00	.12	8	592.	0	32	54	11	0	0	0	0	0	0	0	0	0	0	0
121911	833.	.10	.25	-5.1	0.00	.12	8	592.	1	25	59	12	0	0	0	0	0	0	0	0	0	0	0
121927	841.	.11	.30	-5.0	0.00	.10	8	467.	1	23	60	13	1	0	0	0	0	0	0	0	0	0	0
121943	854.	.11	0.00	-4.7	0.00	.10	8	467.	1	22	56	16	2	0	0	0	0	0	0	0	0	0	0
121959	854.	.11	.12	-4.3	0.00	.06	8	303.	1	23	58	14	1	0	0	0	0	0	0	0	0	0	0
122015	854.	.11	.25	-4.3	0.00	.03	7	303.	6	39	46	6	0	0	0	0	0	0	0	0	0	0	0
122031	854.	.11	.35	-4.1	0.00	.03	6	409.	8	66	24	1	0	0	0	0	0	0	0	0	0	0	0
122047	862.	.08	.42	-3.7	0.00	.02	5	409.	23	59	16	0	0	0	0	0	0	0	0	0	0	0	0
1221 3	871.	.05	.43	-3.2	0.00	.00	3	5.	69	30	0	0	0	0	0	0	0	0	0	0	0	0	0
122119	871.	.05	.42	-3.1	0.00	.00	4	5.	50	49	0	0	0	0	0	0	0	0	0	0	0	0	0
122135	871.	.05	.42	-3.2	0.00	.00	5	2.	33	55	10	0	0	0	0	0	0	0	0	0	0	0	0
122151	871.	.05	.44	-3.9	0.00	.00	6	2.	15	47	33	3	0	0	0	0	0	0	0	0	0	0	0
1222 7	871.	.05	.08	-4.4	0.00	.10	8	480.	1	24	59	13	0	0	0	0	0	0	0	0	0	0	0
122223	871.	.05	.14	-4.8	0.00	.10	8	480.	1	24	56	15	1	0	0	0	0	0	0	0	0	0	0
122239	871.	.05	.22	-5.0	0.00	.12	9	485.	1	18	58	19	1	0	0	0	0	0	0	0	0	0	0
122255	871.	.05	.33	-5.1	0.00	.14	9	485.	0	11	53	28	4	0	0	0	0	0	0	0	0	0	0
122311	889.	.05	.07	-4.9	0.00	.01	9	21.	0	16	56	22	3	0	0	0	0	0	0	0	0	0	0
122327	898.	.05	.14	-4.9	0.00	.00	8	21.	1	21	57	16	1	0	0	0	0	0	0	0	0	0	0
122343	898.	.05	.31	-4.6	0.00	.13	9	507.	0	18	57	20	2	0	0	0	0	0	0	0	0	0	0
122359	910.	.09	.18	-4.6	0.00	.11	8	507.	1	20	58	17	1	0	0	0	0	0	0	0	0	0	0
122415	913.	.09	.05	-4.5	0.00	.07	8	376.	1	25	57	14	1	0	0	0	0	0	0	0	0	0	0
122431	913.	.09	.25	-4.4	0.00	.08	8	376.	0	24	57	15	1	0	0	0	0	0	0	0	0	0	0
122447	918.	.11	.40	-4.3	0.00	.12	8	525.	1	22	57	16	1	0	0	0	0	0	0	0	0	0	0
1225 3	923.	.12	0.00	-4.4	0.00	.12	8	525.	1	22	57	16	1	0	0	0	0	0	0	0	0	0	0
122519	923.	.12	.16	-4.3	0.00	.02	8	106.	1	28	55	13	0	0	0	0	0	0	0	0	0	0	0
122535	931.	.13	.29	-4.2	0.00	.02	8	106.	0	27	56	13	0	0	0	0	0	0	0	0	0	0	0
122551	946.	.14	.08	-4.2	0.00	.13	8	622.	0	27	56	13	0	0	0	0	0	0	0	0	0	0	0
1226 7	946.	.14	.26	-4.2	0.00	.13	8	622.	1	24	60	12	0	0	0	0	0	0	0	0	0	0	0
122623	946.	.13	.32	-4.3	0.00	.08	8	464.	2	26	59	10	0	0	0	0	0	0	0	0	0	0	0
122639	956.	.07	0.00	-4.1	0.00	.06	8	464.	4	33	52	8	0	0	0	0	0	0	0	0	0	0	0
122655	956.	.07	.10	-4.2	0.00	.07	8	464.	3	28	58	8	0	0	0	0	0	0	0	0	0	0	0
122711	232.	.07	.22	-4.0	0.00	.13	9	464.	0	13	66	17	1	0	0	0	0	0	0	0	0	0	0
122727	0.	.07	.32	-4.1	0.00	.14	8	575.	0	20	63	13	0	0	0	0	0	0	0	0	0	0	0
122743	12.	.06	.34	-4.1	0.00	.13	8	575.	1	20	63	13	1	0	0	0	0	0	0	0	0	0	0

DATE: 3/20/80 NATURAL ICING ENCOUNTER FLIGHT 26 TAPE RECORD # 101

TIME (LST)	IRU (CNTS)	MK 10 (G/M3)	MK 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
122759	20.	.06	.09	-3.8	0.00	.04	A	237.	2	28	58	10	0	0	0	0	0	0	0	0	0	0	0
122815	20.	.06	0.00	-3.6	0.00	.01	4	237.	43	53	3	0	0	0	0	0	0	0	0	0	0	0	0
122831	20.	.06	0.00	-3.6	0.00	.00	7	1.	9	42	43	4	0	0	0	0	0	0	0	0	0	0	0
122847	20.	.06	.01	-3.8	0.00	.00	7	1.	6	38	49	5	0	0	0	0	0	0	0	0	0	0	0
1229 3	20.	.06	.15	-3.9	0.00	.07	A	430.	3	27	60	9	0	0	0	0	0	0	0	0	0	0	0
122919	20.	.06	.29	-3.8	0.00	.09	A	430.	1	22	63	10	0	0	0	0	0	0	0	0	0	0	0
122935	27.	.08	.42	-3.6	0.00	.07	8	520.	4	34	53	6	0	0	0	0	0	0	0	0	0	0	0
122951	32.	.08	.21	-3.5	0.00	.04	7	520.	9	44	42	3	0	0	0	0	0	0	0	0	0	0	0
1230 7	32.	.08	0.00	-3.4	0.00	.04	7	404.	9	41	44	4	0	0	0	0	0	0	0	0	0	0	0
123023	32.	.08	.03	-3.4	0.00	.04	7	404.	7	43	44	4	0	0	0	0	0	0	0	0	0	0	0
123039	32.	.08	.07	-3.5	0.00	.04	7	410.	7	43	44	4	0	0	0	0	0	0	0	0	0	0	0
123055	31.	.08	0.00	-3.8	0.00	.01	3	410.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
123111	31.	.08	0.00	-3.7	0.00	.00	3	2.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
123127	32.	.08	.00	-3.7	0.00	.00	5	2.	38	50	10	0	0	0	0	0	0	0	0	0	0	0	0
123143	32.	.08	.12	-4.1	0.00	.00	A	1.	1	29	55	12	0	0	0	0	0	0	0	0	0	0	0
123159	32.	.08	.29	-4.4	0.00	.00	9	1.	0	17	59	19	2	0	0	0	0	0	0	0	0	0	0
123215	43.	.10	.29	-4.1	0.00	.18	9	614.	0	10	58	26	3	0	0	0	0	0	0	0	0	0	0
123231	45.	.10	0.00	-4.5	0.00	.20	9	614.	0	9	55	28	4	0	1	0	0	0	0	0	0	0	0
123247	46.	.10	.16	-4.9	0.00	.14	9	439.	0	9	49	32	6	0	0	0	0	0	0	0	0	0	0
1233 3	53.	.11	.33	-5.1	0.00	.11	9	439.	0	16	57	21	2	0	0	0	0	0	0	0	0	0	0
123319	79.	.12	.02	-5.1	0.00	.13	9	446.	0	13	57	23	2	0	0	0	0	0	0	0	0	0	0
123335	79.	.12	.25	-5.0	0.00	.10	A	446.	0	21	57	17	1	0	0	0	0	0	0	0	0	0	0
123351	92.	.12	.25	-4.9	0.00	.12	8	529.	0	22	58	16	1	0	0	0	0	0	0	0	0	0	0
1234 7	105.	.12	.08	-4.9	0.00	.13	8	529.	0	21	59	16	1	0	0	0	0	0	0	0	0	0	0
123423	105.	.12	.31	-5.0	0.00	.14	8	603.	0	20	59	16	1	0	0	0	0	0	0	0	0	0	0
123439	118.	.11	.34	-5.0	0.00	.19	9	603.	0	8	51	31	5	0	1	0	0	0	0	0	0	0	0
123455	129.	.10	.03	-5.0	0.00	.09	9	302.	0	11	54	28	4	0	0	0	0	0	0	0	0	0	0
123511	129.	.10	.27	-5.0	0.00	.07	9	302.	0	20	56	19	2	0	0	0	0	0	0	0	0	0	0
123527	149.	.13	.19	-5.1	0.00	.11	8	511.	0	26	56	14	1	0	0	0	0	0	0	0	0	0	0
123543	159.	.13	.09	-5.0	0.00	.13	9	511.	0	16	57	21	2	0	0	0	0	0	0	0	0	0	0
123559	159.	.13	.31	-4.7	0.00	.12	8	539.	1	23	57	16	1	0	0	0	0	0	0	0	0	0	0
123615	178.	.11	.12	-4.6	0.00	.10	8	539.	1	25	57	13	1	0	0	0	0	0	0	0	0	0	0
123631	182.	.11	.10	-4.6	0.00	.12	8	531.	1	21	63	12	0	0	0	0	0	0	0	0	0	0	0
123647	182.	.11	.24	-4.5	0.00	.11	8	531.	1	26	59	11	0	0	0	0	0	0	0	0	0	0	0
1237 3	191.	.10	.35	-4.4	0.00	.11	8	491.	0	22	58	16	1	0	0	0	0	0	0	0	0	0	0
123719	206.	.09	.01	-4.3	0.00	.11	8	491.	0	26	57	13	0	0	0	0	0	0	0	0	0	0	0
123735	206.	.09	.20	-4.4	0.00	.11	8	551.	1	28	55	13	0	0	0	0	0	0	0	0	0	0	0
123751	206.	.09	.33	-4.4	0.00	.12	8	551.	1	23	57	15	1	0	0	0	0	0	0	0	0	0	0
1238 7	226.	.08	.10	-4.3	0.00	.11	8	517.	1	25	58	13	0	0	0	0	0	0	0	0	0	0	0
123823	228.	.08	.16	-4.2	0.00	.11	8	517.	0	28	57	12	0	0	0	0	0	0	0	0	0	0	0
123839	229.	.09	.37	-4.2	0.00	.11	8	549.	1	26	58	13	0	0	0	0	0	0	0	0	0	0	0
123855	254.	.11	.02	-4.2	0.00	.12	8	549.	1	20	63	12	0	0	0	0	0	0	0	0	0	0	0
123911	254.	.11	.06	-4.1	0.00	.07	A	434.	3	25	60	9	0	0	0	0	0	0	0	0	0	0	0
123927	253.	.11	.15	-4.1	0.00	.05	8	434.	5	34	49	10	1	0	0	0	0	0	0	0	0	0	0
123943	254.	.11	.28	-4.0	0.00	.04	A	253.	3	31	52	10	0	0	0	0	0	0	0	0	0	0	0
123959	260.	.10	.38	-3.9	0.00	.05	A	253.	2	23	59	13	1	0	0	0	0	0	0	0	0	0	0
124015	279.	.07	.33	-4.2	0.00	.01	A	56.	1	19	59	17	1	0	0	0	0	0	0	0	0	0	0
124031	279.	.07	0.00	-4.3	0.00	.01	A	56.	2	27	59	10	0	0	0	0	0	0	0	0	0	0	0
124047	279.	.07	.07	-4.1	0.00	.07	9	235.	0	13	59	22	2	0	1	0	0	0	0	0	0	0	0
1241 3	281.	.08	.33	-4.1	0.00	.07	9	235.	0	11	56	26	3	0	1	0	0	0	0	0	0	0	0

DATE: 3/24/80 NATURAL ICING ENCOUNTER FLIGHT 26 TAPE RECORD # 126

TIME (LST)	IRU (CNTS)	MK 10 (G/M3)	MK 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
124119	329.	.15	.06	-4.1	0.00	.13	9	489.	0	14	58	22	2	0	0	0	0	0	0	0	0	0	0
124135	329.	.15	.17	-4.1	0.00	.13	9	489.	0	16	58	20	2	0	0	0	0	0	0	0	0	0	0
124151	332.	.14	.38	-4.3	0.00	.13	9	494.	0	14	55	24	3	0	0	0	0	0	0	0	0	0	0
1242 7	355.	.11	0.00	-4.2	0.00	.14	9	494.	0	12	55	26	4	0	0	0	0	0	0	0	0	0	0
124223	355.	.11	.12	-4.1	0.00	.09	9	348.	0	18	58	19	1	0	0	0	0	0	0	0	0	0	0
124239	363.	.13	.33	-4.2	0.00	.08	8	348.	0	23	56	16	1	0	0	0	0	0	0	0	0	0	0
124255	388.	.15	.04	-4.1	0.00	.12	8	524.	0	25	56	15	1	0	0	0	0	0	0	0	0	0	0
124311	389.	.15	.25	-4.1	0.00	.14	9	524.	0	16	57	21	2	0	0	0	0	0	0	0	0	0	0
124327	406.	.14	.18	-4.3	0.00	.16	9	568.	0	14	58	21	2	0	0	0	0	0	0	0	0	0	0
124343	416.	.13	.17	-4.5	0.00	.18	9	568.	0	11	57	25	3	0	1	0	0	0	0	0	0	0	0
124359	423.	.13	.33	-4.5	0.00	.19	9	583.	0	10	56	27	4	0	0	0	0	0	0	0	0	0	0
124415	440.	.13	0.00	-4.5	0.00	.17	9	583.	0	11	57	25	3	0	0	0	0	0	0	0	0	0	0
124431	440.	.13	.09	-4.5	0.00	.10	9	383.	1	13	54	26	3	0	0	0	0	0	0	0	0	0	0
124447	442.	.13	.34	-5.0	0.00	.11	9	383.	0	12	56	25	3	0	0	0	0	0	0	0	0	0	0
1245 3	476.	.14	.05	-5.1	0.00	.16	9	566.	0	14	56	23	3	0	0	0	0	0	0	0	0	0	0
124519	476.	.14	.19	-5.2	0.00	.18	9	566.	0	10	55	27	4	0	1	0	0	0	0	0	0	0	0
124535	491.	.15	.20	-5.2	0.00	.21	9	548.	0	6	54	31	5	0	1	0	0	0	0	0	0	0	0
124551	505.	.15	.17	-5.0	0.00	.18	9	548.	0	9	57	26	4	0	1	0	0	0	0	0	0	0	0
1246 7	515.	.15	.25	-5.1	0.00	.15	9	593.	0	15	59	21	2	0	0	0	0	0	0	0	0	0	0
124623	529.	.15	.02	-4.8	0.00	.14	9	593.	1	17	58	20	1	0	0	0	0	0	0	0	0	0	0
124639	529.	.15	.19	-4.4	0.00	.10	9	353.	0	15	60	20	2	0	0	0	0	0	0	0	0	0	0
124655	529.	.15	.37	-4.4	0.00	.04	8	353.	5	25	52	15	1	0	0	0	0	0	0	0	0	0	0
124711	546.	.09	.40	-4.5	0.00	.07	8	388.	2	19	57	18	1	0	0	0	0	0	0	0	0	0	0
124727	553.	.08	.15	-4.5	0.00	.08	8	388.	1	21	60	15	0	0	0	0	0	0	0	0	0	0	0
124743	551.	.08	.08	-4.6	0.00	.15	9	603.	1	14	58	22	2	0	0	0	0	0	0	0	0	0	0
124759	553.	.08	.18	-4.6	0.00	.16	9	603.	1	12	49	30	5	0	0	0	0	0	0	0	0	0	0
124815	553.	.08	.31	-4.3	0.00	.09	9	335.	1	14	56	24	3	0	0	0	0	0	0	0	0	0	0
124831	574.	.07	.13	-4.3	0.00	.09	9	335.	0	14	57	22	2	0	0	0	0	0	0	0	0	0	0
124847	580.	.07	.16	-4.3	0.00	.15	9	550.	0	15	58	22	2	0	0	0	0	0	0	0	0	0	0
1249 3	583.	.08	.34	-4.1	0.00	.15	9	550.	0	16	59	20	2	0	0	0	0	0	0	0	0	0	0
124919	602.	.11	.08	-4.0	0.00	.13	8	568.	0	21	58	17	1	0	0	0	0	0	0	0	0	0	0
124935	602.	.11	.18	-4.0	0.00	.14	9	568.	0	17	58	20	2	0	0	0	0	0	0	0	0	0	0
124951	609.	.12	.36	-4.0	0.00	.13	9	493.	0	17	57	20	2	0	0	0	0	0	0	0	0	0	0
1250 7	630.	.12	.00	-4.2	0.00	.11	8	493.	1	20	58	16	1	0	0	0	0	0	0	0	0	0	0
125023	630.	.12	.13	-4.3	0.00	.08	8	389.	1	23	61	12	0	0	0	0	0	0	0	0	0	0	0
125039	630.	.12	.29	-4.6	0.00	.06	8	389.	3	26	59	10	0	0	0	0	0	0	0	0	0	0	0
125055	630.	.12	.46	-4.9	0.00	.04	7	409.	6	41	46	5	0	0	0	0	0	0	0	0	0	0	0
125111	643.	.08	.20	-4.8	0.00	.08	8	409.	1	28	58	11	0	0	0	0	0	0	0	0	0	0	0
125127	651.	.06	.08	-4.7	0.00	.11	8	528.	1	24	61	11	0	0	0	0	0	0	0	0	0	0	0
125143	651.	.06	.25	-4.3	0.00	.10	8	528.	1	27	58	11	0	0	0	0	0	0	0	0	0	0	0
125159	658.	.08	.01	-4.3	0.00	.04	8	247.	2	30	55	9	0	0	0	0	0	0	0	0	0	0	0
125215	675.	.09	.05	-4.3	0.00	.04	8	247.	1	37	51	9	0	0	0	0	0	0	0	0	0	0	0
125231	675.	.09	.19	-4.3	0.00	.11	8	551.	1	30	55	12	0	0	0	0	0	0	0	0	0	0	0
125247	679.	.10	.38	-4.3	0.00	.11	8	551.	1	26	59	11	0	0	0	0	0	0	0	0	0	0	0
1253 3	702.	.11	0.00	-4.3	0.00	.07	8	442.	2	29	58	9	0	0	0	0	0	0	0	0	0	0	0
125319	702.	.11	.05	-4.3	0.00	.07	8	442.	3	28	56	10	0	0	0	0	0	0	0	0	0	0	0
125335	702.	.11	.11	-4.3	0.00	.04	8	376.	6	32	51	9	0	0	0	0	0	0	0	0	0	0	0
125351	702.	.11	.23	-4.3	0.00	.08	8	376.	1	24	60	13	0	0	0	0	0	0	0	0	0	0	0
1254 7	705.	.10	.37	-4.2	0.00	.09	8	461.	1	22	61	13	1	0	0	0	0	0	0	0	0	0	0
125423	729.	.07	.02	-4.1	0.00	.10	8	461.	0	28	55	13	0	0	0	0	0	0	0	0	0	0	0

DATE: 3/24/80 NATURAL ICING ENCOUNTER FLIGHT 26 TAPE RECORD # 151

TIME (LST)	IRU (CNTS)	MK 10 (G/M3)	MK 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
125439	729.	.07	.20	-4.2	0.00	.12	A	595.	1	26	56	13	0	0	0	0	0	0	0	0	0	0	0
125455	741.	.11	.38	-4.1	0.00	.13	A	595.	1	24	58	14	0	0	0	0	0	0	0	0	0	0	0
125511	756.	.14	.04	-4.1	0.00	.17	9	574.	0	13	57	23	5	0	1	0	0	0	0	0	0	0	0
125527	756.	.14	.33	-4.2	0.00	.16	9	574.	0	13	56	23	5	0	1	0	0	0	0	0	0	0	0
125543	785.	.16	.08	-4.3	0.00	.15	9	499.	0	12	55	26	3	0	1	0	0	0	0	0	0	0	0
125559	786.	.16	.27	-4.4	0.00	.14	9	499.	0	14	56	24	2	0	0	0	0	0	0	0	0	0	0
125615	801.	.14	.26	-4.4	0.00	.11	A	497.	1	20	56	18	1	0	0	0	0	0	0	0	0	0	0
125631	808.	.13	.09	-4.4	0.00	.11	A	497.	1	24	55	16	1	0	0	0	0	0	0	0	0	0	0
125647	811.	.14	.34	-4.5	0.00	.15	9	595.	0	19	55	20	2	0	0	0	0	0	0	0	0	0	0
1257 3	837.	.15	.03	-4.5	0.00	.18	9	595.	0	12	51	28	4	0	1	0	0	0	0	0	0	0	0
125719	837.	.15	.24	-4.6	0.00	.11	9	519.	1	17	51	24	4	0	0	0	0	0	0	0	0	0	0
125735	839.	.14	.37	-4.7	0.00	.11	A	519.	1	23	56	16	1	0	0	0	0	0	0	0	0	0	0
125751	848.	.09	0.00	-4.6	0.00	.10	9	420.	1	17	55	21	3	0	0	0	0	0	0	0	0	0	0
1258 7	848.	.09	.13	-4.5	0.00	.09	A	420.	1	22	55	17	2	0	0	0	0	0	0	0	0	0	0
125823	848.	.09	.34	-4.5	0.00	.12	A	566.	1	24	58	14	1	0	0	0	0	0	0	0	0	0	0
125839	859.	.11	.10	-4.5	0.00	.13	A	566.	1	20	63	13	1	0	0	0	0	0	0	0	0	0	0
125855	860.	.11	.11	-4.5	0.00	.10	A	515.	1	21	58	15	2	0	0	0	0	0	0	0	0	0	0
125911	860.	.11	.28	-4.6	0.00	.11	A	515.	1	20	56	18	2	0	0	0	0	0	0	0	0	0	0
125927	870.	.10	.27	-4.6	0.00	.09	9	342.	1	16	55	22	3	0	0	0	0	0	0	0	0	0	0
125943	880.	.09	.03	-4.5	0.00	.08	9	342.	0	18	56	20	2	0	0	0	0	0	0	0	0	0	0
125959	880.	.09	.19	-4.6	0.00	.13	A	602.	1	24	55	17	1	0	0	0	0	0	0	0	0	0	0
13 015	879.	.09	.36	-4.4	0.00	.11	A	602.	1	31	53	12	0	0	0	0	0	0	0	0	0	0	0
13 031	898.	.09	.05	-4.1	0.00	.14	A	630.	1	22	60	14	1	0	0	0	0	0	0	0	0	0	0
13 047	900.	.09	.17	-3.7	0.00	.10	8	630.	2	26	59	10	0	0	0	0	0	0	0	0	0	0	0
13 1 3	900.	.09	.30	-3.7	0.00	.05	7	511.	7	39	47	5	0	0	0	0	0	0	0	0	0	0	0
13 119	900.	.09	.36	-3.5	0.00	.02	5	511.	31	54	12	0	0	0	0	0	0	0	0	0	0	0	0
13 135	900.	.09	.37	-4.2	0.00	.00	4	77.	42	53	3	0	0	0	0	0	0	0	0	0	0	0	0
13 151	899.	.09	.37	-4.0	0.00	.00	4	77.	55	44	0	0	0	0	0	0	0	0	0	0	0	0	0
13 2 7	900.	.09	.36	-3.5	0.00	.00	3	1.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13 223	900.	.09	.36	-2.9	0.00	.00	3	1.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13 239	900.	.09	.34	-2.2	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13 255	900.	.09	.33	-1.8	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13 311	900.	.08	.32	-1.0	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13 327	900.	.00	.32	-.7	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NATIONAL ICING ENCOUNTER FLIGHT 26
AIRCRAFT STATE PARAMETERS (JUNE 1ST 518)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
113439	12.7	592.	.26	66.2	3.4
113455	13.9	598.	.26	68.6	4.4
113511	13.9	596.	.26	67.4	4.2
113527	13.7	594.	.26	66.5	3.2
113543	13.6	592.	.26	65.7	3.4
113559	12.6	590.	.26	61.7	3.6
113615	9.6	596.	.26	53.2	3.8
113631	10.2	596.	.26	53.7	3.6
113647	10.1	594.	.26	53.3	4.6
1137 3	10.2	592.	.26	53.8	4.5
113719	10.2	598.	.26	53.5	3.7
113735	10.2	598.	.26	54.1	3.7
113751	9.5	598.	.26	53.5	3.9
1138 7	8.6	600.	.26	53.7	4.5
113823	14.1	600.	.24	66.5	4.5
113839	13.6	600.	.30	66.8	3.6
113855	25.2	555.	4.67	87.2	3.0
113911	35.4	551.	6.22	99.3	3.1
113927	35.6	553.	6.08	98.4	2.1
113943	36.5	549.	6.35	100.3	2.2
113959	37.2	551.	6.27	100.0	2.2
114015	35.6	546.	5.91	95.1	1.7
114031	18.4	586.	1.49	69.3	3.6
114047	13.4	602.	.27	66.3	4.4
1141 3	13.5	600.	.80	66.4	4.0
114119	26.4	553.	5.38	91.5	3.2
114135	38.3	606.	6.49	102.6	41.4
114151	40.4	796.	6.76	105.2	51.2
1142 7	40.8	979.	6.79	105.9	31.2
114223	38.5	1243.	6.80	103.5	45.0
114239	40.1	1539.	6.79	103.4	66.7
114255	39.7	1825.	6.79	102.5	68.2
114311	40.8	2106.	7.10	104.7	65.8
114327	42.1	2440.	7.13	104.6	66.7
114343	41.1	2734.	7.13	103.4	67.3
114359	41.4	2992.	7.13	103.1	68.5
114415	41.5	3202.	7.13	102.2	70.8
114431	41.5	3524.	7.12	101.6	72.6
114447	40.7	3814.	7.12	103.7	71.9
1145 3	36.2	3975.	6.85	100.7	85.5
114519	34.0	3918.	6.14	98.0	101.4
114535	33.5	3887.	6.12	93.3	93.0
114551	36.5	3927.	6.54	97.4	82.8
1146 7	36.9	3941.	6.53	97.7	91.6
114623	37.0	3952.	6.53	97.8	92.9
114639	37.5	3946.	6.53	98.4	97.0
114655	37.3	3927.	6.53	98.2	94.9
114711	37.5	3943.	6.54	98.9	89.9
114727	37.9	4002.	6.62	99.3	86.9
114743	38.2	4009.	6.62	99.7	93.7

NATURAL ICING ENCOUNTER FLIGHT 26
AIRCRAFT STATE PARAMETERS (JUN-1H 31R)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
114759	38.1	3946.	6.58	99.4	97.0
114815	37.0	3968.	6.49	98.0	96.F
114831	37.0	3959.	6.49	98.0	94.R
114847	36.R	3950.	6.49	97.7	93.5
1149 3	36.R	3964.	6.49	97.6	92.4
114919	36.3	3934.	6.49	97.3	94.6
114935	35.4	3964.	6.50	96.6	91.2
114951	36.4	3957.	6.49	97.2	90.4
1150 7	36.1	4116.	6.50	96.1	74.9
115023	36.3	4123.	6.50	96.7	86.2
115039	36.3	4135.	6.50	96.6	88.6
115055	36.1	4178.	6.50	96.9	88.7
115111	36.6	4183.	6.50	97.1	91.4
115127	36.6	4167.	6.50	97.1	93.C
115143	36.5	4185.	6.50	96.9	91.7
115159	36.6	4206.	6.50	97.2	89.6
115215	35.4	4165.	6.50	96.6	93.7
115231	36.3	4155.	6.50	97.1	94.0
115247	36.2	4217.	6.50	96.6	88.9
1153 3	36.3	4254.	6.50	96.7	90.0
115319	36.0	4325.	6.53	96.2	82.2
115335	37.8	4441.	6.69	98.6	82.9
115351	37.1	4589.	6.70	97.4	76.7
1154 7	37.5	4641.	6.70	97.8	84.3
115423	36.4	4737.	6.71	96.6	86.0
115439	37.4	4657.	6.64	98.0	96.0
115455	35.5	4559.	6.24	95.0	103.6
115511	33.8	4406.	6.07	93.4	101.6
115527	35.5	4376.	6.40	95.8	91.9
115543	35.1	4422.	6.40	95.3	86.4
115559	35.4	4367.	6.39	95.7	92.8
115615	35.5	4376.	6.40	95.8	89.1
115631	34.8	4392.	6.40	94.9	87.6
115647	35.2	4362.	6.39	95.6	91.4
1157 3	35.1	4342.	6.39	95.5	91.8
115719	35.6	4341.	6.57	96.2	85.5
115735	37.3	4335.	6.67	98.8	95.4
115751	37.5	4270.	6.66	99.1	94.4
115R 7	37.3	4295.	6.67	98.7	88.9
115823	37.7	4325.	6.66	99.3	93.1
115839	37.4	4378.	6.67	98.7	89.1
115855	37.6	4372.	6.67	99.1	95.1
115911	37.7	4342.	6.67	99.3	96.3
115927	37.3	4355.	6.67	98.7	97.5
115943	36.7	4295.	6.55	97.9	100.5
115959	35.3	4289.	6.45	96.1	91.8
12 015	35.6	4305.	6.45	96.5	92.7
12 031	35.3	4300.	6.45	96.1	91.5
12 047	35.4	4309.	6.45	96.3	91.0
12 1 3	35.2	4351.	6.45	96.0	86.6

NATURAL ICING ENCOUNTER FLIGHT 26
AIRCRAFT STATE PARAMETERS (JUN-1M 31R)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
12 119	35.1	4351.	6.45	96.0	92.9
12 135	35.2	4312.	6.45	96.1	91.8
12 151	35.1	4295.	6.45	96.0	90.0
12 2 7	35.2	4314.	6.45	96.0	87.8
12 223	35.0	4337.	6.45	95.6	87.1
12 239	35.4	4342.	6.45	96.2	90.7
12 255	35.4	4314.	6.45	96.4	96.7
12 311	35.5	4291.	6.45	96.6	94.4
12 327	35.4	4298.	6.45	96.2	89.5
12 343	35.3	4330.	6.45	96.1	88.4
12 359	35.5	4340.	6.45	96.5	91.6
12 415	35.6	4305.	6.45	96.7	93.1
12 431	35.8	4293.	6.45	97.0	93.1
12 447	35.3	4293.	6.45	96.2	91.4
12 5 3	35.4	4275.	6.45	96.5	94.9
12 519	35.1	4275.	6.45	95.9	90.2
12 535	34.9	4307.	6.45	95.7	86.7
12 551	35.1	4328.	6.45	96.0	89.8
12 6 7	35.2	4305.	6.45	96.1	92.4
12 623	34.8	4284.	6.45	95.6	90.9
12 639	35.1	4247.	6.45	96.1	93.4
12 655	35.3	4261.	6.45	96.4	89.1
12 711	35.2	4309.	6.45	96.2	86.7
12 727	35.4	4321.	6.45	96.4	89.5
12 743	35.4	4337.	6.45	96.3	90.4
12 759	35.3	4342.	6.45	96.2	91.1
12 815	35.0	4339.	6.45	95.9	91.3
12 831	35.2	4314.	6.45	96.1	92.2
12 847	35.3	4291.	6.45	96.5	92.8
12 9 3	35.6	4286.	6.45	96.8	91.8
12 919	35.4	4314.	6.45	96.4	90.6
12 935	35.2	4309.	6.45	96.2	89.3
12 951	35.4	4307.	6.45	96.4	91.1
1210 7	35.3	4332.	6.45	96.1	89.5
121023	35.2	4339.	6.45	96.0	91.5
121039	35.4	4305.	6.45	96.5	94.6
121055	35.5	4261.	6.45	96.6	93.1
121111	35.7	4252.	6.45	97.0	89.7
121127	35.1	4298.	6.45	96.0	85.0
121143	35.2	4353.	6.45	96.2	87.3
121159	35.7	4295.	6.45	97.0	94.7
121215	35.2	4279.	6.45	96.2	91.1
121231	35.4	4275.	6.45	96.6	92.8
121247	34.7	4254.	6.45	96.1	89.9
1213 3	35.4	4265.	6.45	96.6	89.7
121319	34.5	4316.	6.45	95.7	85.9
121335	34.3	4309.	6.45	96.0	91.4
121351	35.2	4293.	6.45	96.3	93.6
1214 7	35.7	4252.	6.45	97.1	95.6
121423	36.2	4181.	6.45	97.8	99.2

NATURAL ICING ENCOUNTER FLIGHT 26
AIRCRAFT STATE PARAMETERS (JUN-IN 318)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
121439	34.2	4236.	6.46	95.7	84.6
121455	33.9	4348.	6.46	95.3	80.5
121511	35.3	4325.	6.45	96.5	90.9
121527	35.3	4342.	6.41	96.0	90.4
121543	31.1	4411.	6.25	92.2	86.7
121559	32.4	4337.	6.26	93.6	93.6
121615	33.3	4395.	6.28	94.0	85.5
121631	33.2	4385.	6.26	93.6	89.8
121647	33.6	4337.	6.29	94.0	89.2
1217 3	34.4	4213.	6.29	95.5	90.6
121719	34.5	4185.	6.30	95.5	89.4
121735	34.4	4229.	6.32	95.5	86.1
121751	34.1	4231.	6.28	94.9	87.1
1218 7	32.6	4222.	6.07	92.8	90.6
121823	32.6	4213.	6.06	92.6	90.8
121839	32.1	4249.	6.04	91.8	86.7
121855	32.3	4229.	6.04	91.6	91.9
121911	31.7	4203.	6.06	91.8	87.6
121927	30.3	4222.	6.05	90.8	84.4
121943	29.6	4231.	5.69	88.0	87.8
121959	27.6	4140.	5.40	84.6	83.3
122015	28.5	4307.	5.52	86.7	90.0
122031	25.8	3941.	5.07	82.6	93.3
122047	23.8	3848.	4.88	80.6	90.3
1221 3	23.4	3857.	5.04	81.7	91.2
122119	31.8	3542.	6.13	93.9	82.1
122135	38.0	3050.	6.82	102.2	74.9
122151	42.9	3048.	7.34	107.9	83.7
1222 7	38.3	4052.	6.78	100.9	88.1
122223	37.8	4210.	6.80	100.0	84.7
122239	38.0	4339.	6.81	100.3	85.5
122255	33.9	4450.	6.22	93.5	87.8
122311	31.6	4434.	5.94	90.8	90.1
122327	32.4	4325.	6.03	92.5	97.4
122343	28.0	4309.	5.46	85.5	88.0
122359	33.8	4245.	6.26	94.8	89.3
122415	33.5	4263.	6.22	94.1	88.8
122431	33.6	4233.	6.22	94.2	90.9
122447	33.4	4245.	6.22	93.9	87.2
1225 3	33.5	4247.	6.22	94.6	87.6
122519	33.2	4291.	6.22	93.6	85.7
122535	33.4	4325.	6.22	93.8	86.7
122551	33.6	4342.	6.22	94.1	90.1
1226 7	33.5	4261.	6.23	94.7	97.5
122623	32.5	4222.	6.23	94.0	95.0
122639	33.5	4245.	6.23	94.1	90.6
122655	33.4	4289.	6.22	94.0	89.1
122711	33.1	4399.	6.22	93.2	82.9
122727	33.2	4446.	6.22	93.4	86.7
122743	33.0	4404.	6.16	93.1	90.8

NATURAL ICING EXPERIMENT FLIGHT 26
AIRCRAFT STATE PARAMETERS (JUNE 1M 31M)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
122759	28.1	4404.	5.1M	92.2	93.3
122815	29.7	4346.	5.21	88.F	82.6
122831	32.3	4361.	0.13	92.2	82.F
122847	32.5	4323.	0.13	93.7	91.7
1229 3	32.8	4282.	0.13	93.3	96.4
122919	32.8	4284.	0.13	93.1	91.3
122935	32.6	4240.	0.1F	92.4	91.4
122951	32.5	4240.	0.13	92.F	89.2
1230 7	32.6	4217.	0.13	93.F	91.2
123023	32.E	4199.	0.13	92.9	89.3
123039	32.5	4208.	0.13	92.2	87.1
123055	31.4	1261.	0.13	91.7	82.E
123111	31.3	4351.	0.13	91.6	79.F
123127	32.1	4429.	0.13	90.F	80.1
123143	32.3	4515.	0.13	91.3	79.4
123159	32.3	4543.	0.13	91.3	83.4
123215	32.3	4569.	0.13	91.3	82.1
123231	32.3	4541.	0.10	91.6	91.3
123247	32.6	4550.	0.12	92.3	87.4
1233 3	32.7	4471.	0.11	92.6	94.5
123319	33.1	4411.	0.11	93.2	93.E
123335	33.1	4337.	0.17	93.2	88.4
123351	34.8	4402.	0.36	95.8	89.0
1234 7	34.8	4427.	0.36	95.7	89.6
123423	34.6	4459.	0.36	95.2	87.5
123439	34.2	4552.	0.37	94.4	81.F
123455	34.7	4515.	0.36	95.3	92.5
123511	35.1	4418.	0.34	96.1	98.1
123527	34.8	4408.	0.34	95.6	94.4
123543	34.3	4420.	0.33	94.8	89.6
123559	34.9	4337.	0.33	95.9	95.6
123615	35.5	4220.	0.34	96.9	97.3
123631	34.8	4222.	0.34	95.9	92.F
123647	34.6	4310.	0.34	95.2	83.5
1237 3	34.1	4355.	0.33	94.6	80.4
123719	34.6	4335.	0.33	95.5	90.7
123735	34.8	4318.	0.34	95.6	90.6
123751	34.9	4378.	0.34	95.7	88.7
1238 7	34.7	4360.	0.34	95.4	91.5
123823	34.8	4365.	0.34	95.6	91.6
123839	35.1	4335.	0.34	96.2	94.2
123855	35.0	4291.	0.34	96.0	97.3
123911	34.5	4293.	0.34	95.3	91.6
123927	34.4	4295.	0.34	95.3	92.3
123943	34.4	4298.	0.34	95.1	87.5
123959	34.8	4399.	0.46	95.7	82.4
124015	34.5	4397.	0.33	95.3	93.7
124031	34.3	4385.	0.31	94.9	91.9
124047	34.1	4378.	0.32	94.6	88.2
1241 3	34.1	4343.	0.31	94.8	89.9

NATURAL ICING ENCOUNTER FLIGHT 26
AIRCRAFT STATE PARAMETERS (JUNE 18)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
124119	34.3	4402.	6.31	94.8	90.4
124135	34.7	4355.	6.31	95.7	95.3
124151	34.5	4376.	6.31	95.2	89.7
1242 7	34.1	4457.	6.32	94.5	83.0
124223	34.7	4397.	6.31	95.6	90.0
124239	34.4	4344.	6.31	95.3	93.2
124255	35.8	4328.	6.46	97.6	89.6
124311	35.6	4413.	6.49	97.0	87.0
124327	36.1	4404.	6.49	97.8	91.4
124343	36.0	4432.	6.50	97.5	89.6
124359	36.0	4455.	6.50	97.5	93.3
124415	35.7	4450.	6.49	97.1	92.0
124431	35.8	4425.	6.49	97.2	90.3
124447	35.9	4415.	6.50	97.6	92.7
1245 3	36.2	4386.	6.50	98.0	95.3
124519	35.9	4425.	6.50	97.3	90.4
124535	35.4	4543.	6.50	96.5	82.2
124551	36.3	4505.	6.49	97.8	92.5
1246 7	35.9	4483.	6.35	96.9	97.8
124623	35.0	4476.	6.36	95.6	91.9
124639	34.8	4471.	6.35	95.4	89.1
124655	35.0	4459.	6.35	95.8	92.8
124711	34.9	4478.	6.36	95.6	89.0
124727	35.0	4483.	6.36	95.8	89.5
124743	31.2	4499.	6.36	93.9	90.6
124759	34.9	4492.	6.36	95.7	93.6
124815	35.5	4408.	6.35	96.6	97.8
124831	34.8	4392.	6.35	96.0	94.4
124847	33.7	4422.	6.35	94.8	88.7
1249 3	32.5	4388.	6.35	93.9	92.4
124919	35.6	4325.	6.35	96.6	97.0
124935	35.2	4323.	6.36	96.2	91.9
124951	35.1	4344.	6.36	96.1	88.5
1250 7	35.5	4339.	6.35	96.6	94.7
125023	35.1	4366.	6.36	96.0	89.7
125039	35.0	4374.	6.35	95.8	89.0
125055	35.0	4392.	6.35	95.9	91.5
125111	35.1	4413.	6.35	96.0	94.7
125127	35.0	4408.	6.35	95.8	91.6
125143	35.0	4441.	6.35	95.8	90.1
125159	35.2	4425.	6.35	96.0	93.3
125215	35.0	4466.	6.35	95.8	91.7
125231	35.3	4432.	6.35	96.3	95.5
125247	35.3	4411.	6.35	96.3	95.3
1253 3	35.0	4448.	6.35	95.6	91.6
125319	34.7	4478.	6.35	95.2	88.0
125335	34.9	4499.	6.35	95.6	90.9
125351	34.9	4494.	6.35	95.6	94.2
1254 7	34.9	4473.	6.35	95.8	93.9
125423	34.9	4455.	6.35	95.9	95.6

NATURAL ICING ENCOUNTER FLIGHT 26
AIRCRAFT STATE PARAMETERS (JUNE)M 318)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
125439	35.1	4485.	6.36	96.4	92.9
125455	34.8	4450.	6.35	95.9	92.0
125511	35.0	4473.	6.35	96.2	90.2
125527	35.2	4471.	6.35	96.6	94.0
125543	35.0	4476.	6.36	96.1	91.4
125559	35.3	4476.	6.36	96.6	93.2
125615	36.0	4385.	6.35	97.0	100.3
125631	35.4	4378.	6.36	96.9	95.6
125647	34.9	4404.	6.36	96.0	88.2
1257 3	35.0	4522.	6.36	95.9	88.7
125719	36.4	4408.	6.35	98.1	103.6
125735	35.5	4395.	6.36	96.1	93.6
125751	35.1	4443.	6.35	96.0	88.0
125B 7	35.2	4436.	6.35	96.6	92.8
125823	35.6	4388.	6.35	97.2	96.3
125839	35.2	4395.	6.35	96.6	91.3
125855	35.3	4406.	6.35	96.7	92.3
125911	35.2	4406.	6.35	96.6	93.5
125927	35.1	4427.	6.36	96.3	91.2
125943	35.6	4411.	6.35	97.2	96.4
125959	34.6	4388.	6.35	96.5	94.7
13 015	32.0	4355.	6.25	95.6	94.0
13 031	30.5	4197.	5.98	93.9	107.3
13 047	30.6	4050.	5.56	90.7	101.8
13 1 3	24.8	3943.	4.77	81.6	92.1
13 119	23.7	3798.	4.66	80.6	86.5
13 135	23.4	3672.	4.64	80.6	87.8
13 151	21.5	3518.	4.65	80.1	88.1
13 2 7	22.4	3322.	4.40	79.7	93.0
13 223	22.4	3047.	4.55	79.6	96.4
13 239	22.2	2825.	4.36	79.8	94.2
13 255	20.9	2695.	4.12	77.7	88.8
13 311	19.6	2553.	4.01	75.2	79.2
13 327	19.7	2408.	4.02	75.4	79.2

NATURAL ICING ENCOUNTER

0/ 0/ 0
TAPE # 126
FLIGHT # 28
SAMPLE TIME 1534:55

DIAMETER	NUMBER(M-3)	NUMBER(M-3U-1)	MASS(GM-3)	MASS(GM-3U-1)	PERCENT	CUM PERCENT
3	.119E+09	.395E+08	.168E-02	.559E-03	1.	1.
6	.171E+09	.569E+08	.193E-01	.644E-02	6.	7.
9	.221E+09	.737E+08	.844E-01	.281E-01	26.	33.
12	.119E+09	.396E+08	.107E+00	.358E-01	34.	67.
15	.379E+08	.126E+08	.670E-01	.223E-01	21.	88.
18	.813E+07	.271E+07	.248E-01	.828E-02	8.	96.
21	.264E+07	.880E+06	.128E-01	.427E-02	4.	100.
24	.214E+06	.714E+05	.155E-02	.517E-03	0.	100.
27	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
30	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
33	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
36	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
39	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
42	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
45	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
60	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
80	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
100	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
120	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
140	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
160	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
180	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
200	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
220	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
240	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
260	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
280	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.
300	.000E+00	.000E+00	.000E+00	.000E+00	0.	100.

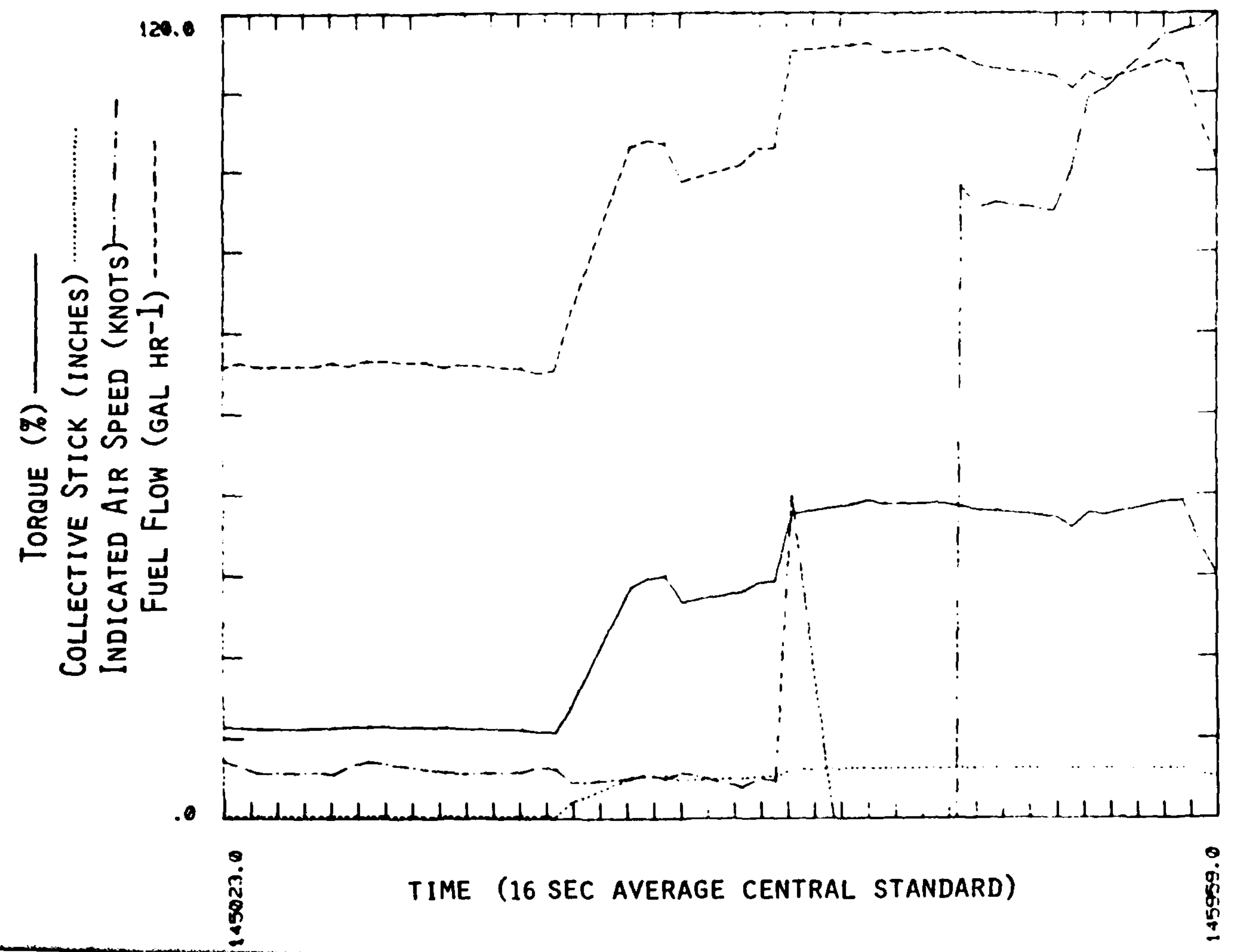
ASP LWC(GM-3)= .319 CPS LWC(GM-3)= .000

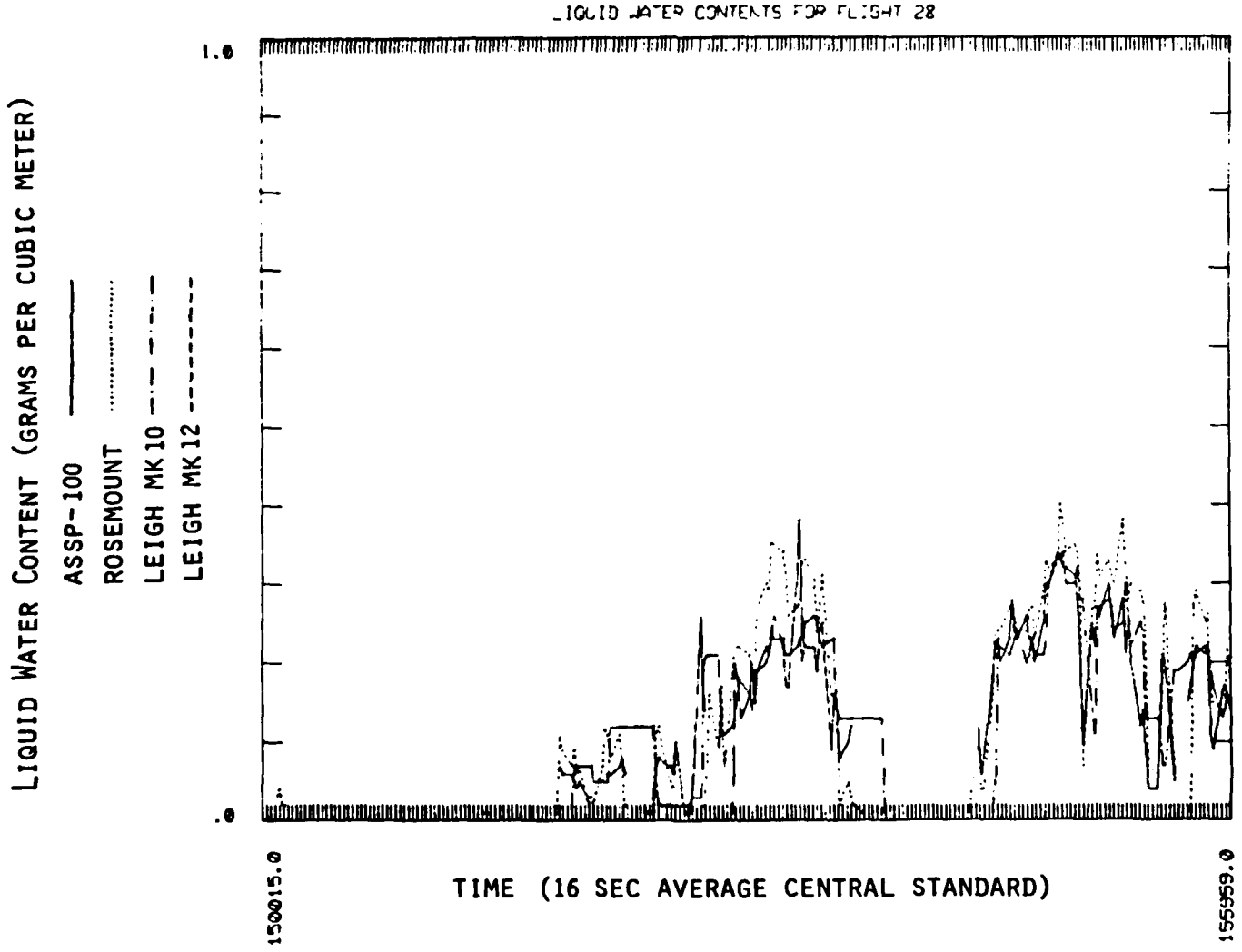
ASP COUNTS(CC-1)= 678. CPS COUNTS(LIT-1)= 0.

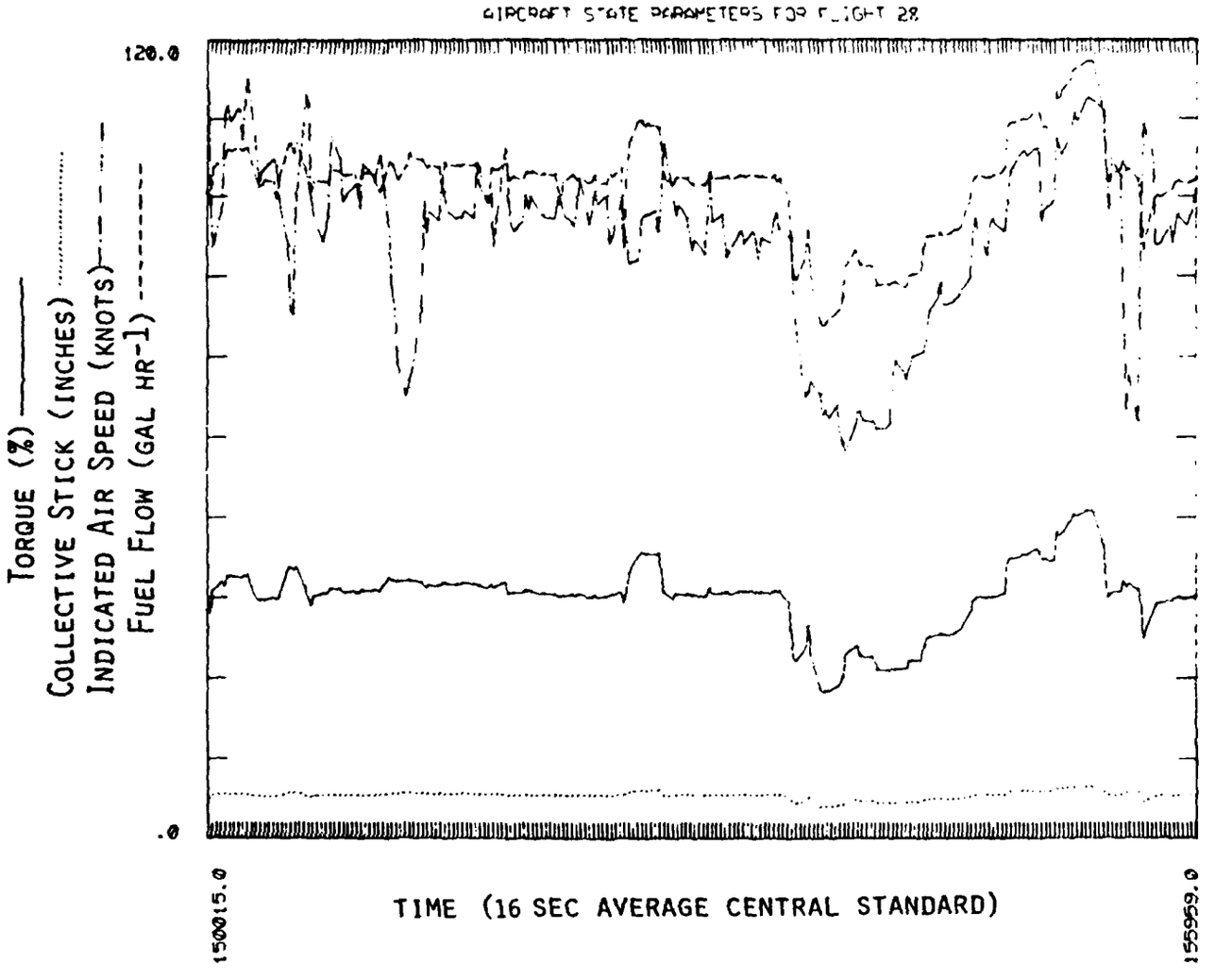
.32 GRAMS PER CUBIC METER @ 12. MICRONS MEDIAN VOLUMETRIC DIAMETER

METEOROLOGY RESEARCH, INC.
AIRCRAFT ICING SUPPORT PACKAGE

AIRCRAFT STATE PARAMETERS FOR FLIGHT 28




LIQUID WATER CONTENTS FOR FLIGHT 28
LIQUID WATER CONTENT (GRAMS PER CUBIC METER)
ASSP-100
ROSEMOUNT
LEIGH MK 10
LEIGH MK 12
1.0
.0
150015.0
155959.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)


AIRCRAFT STATE PARAMETERS FOR FLIGHT 28
120.0
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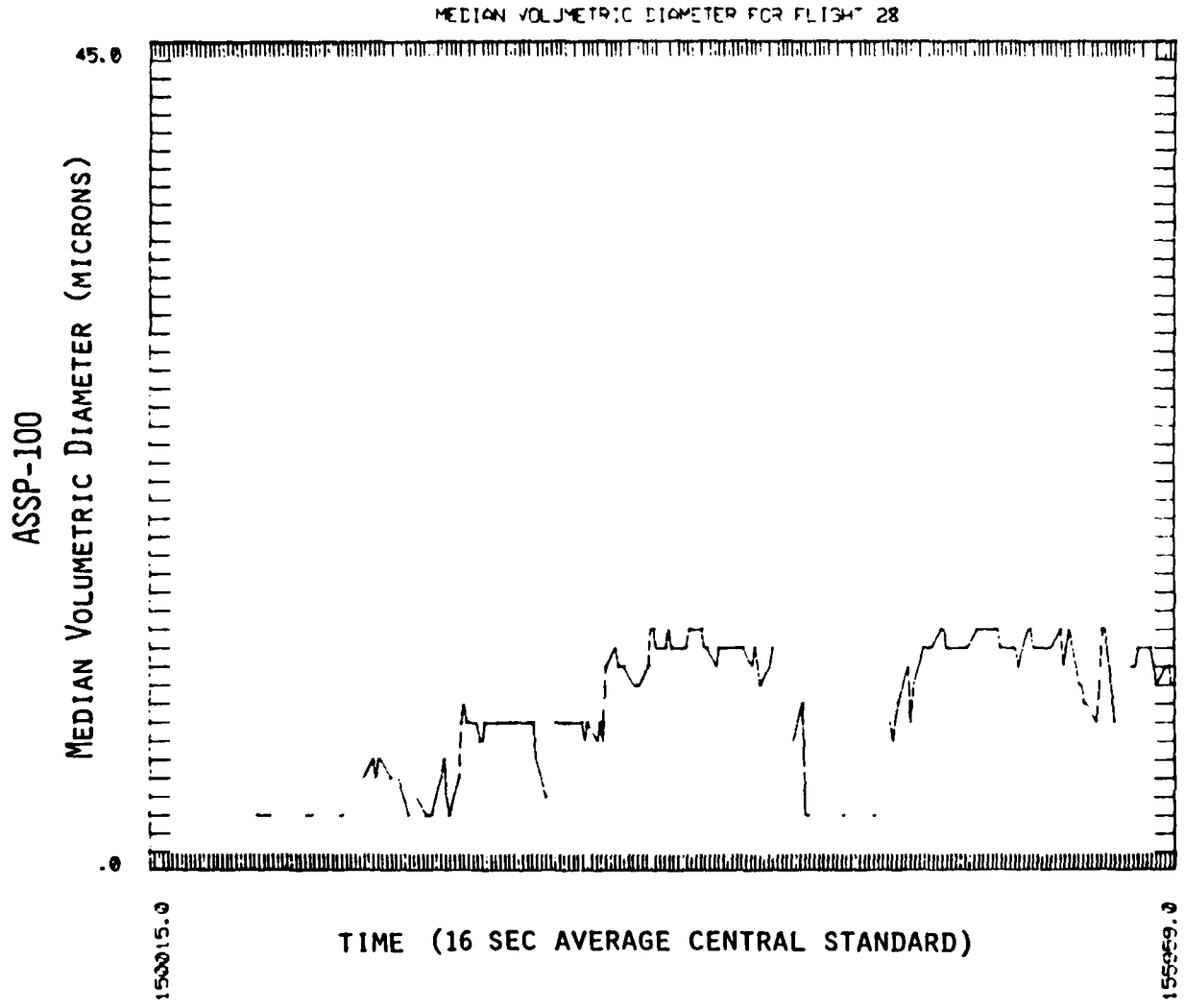
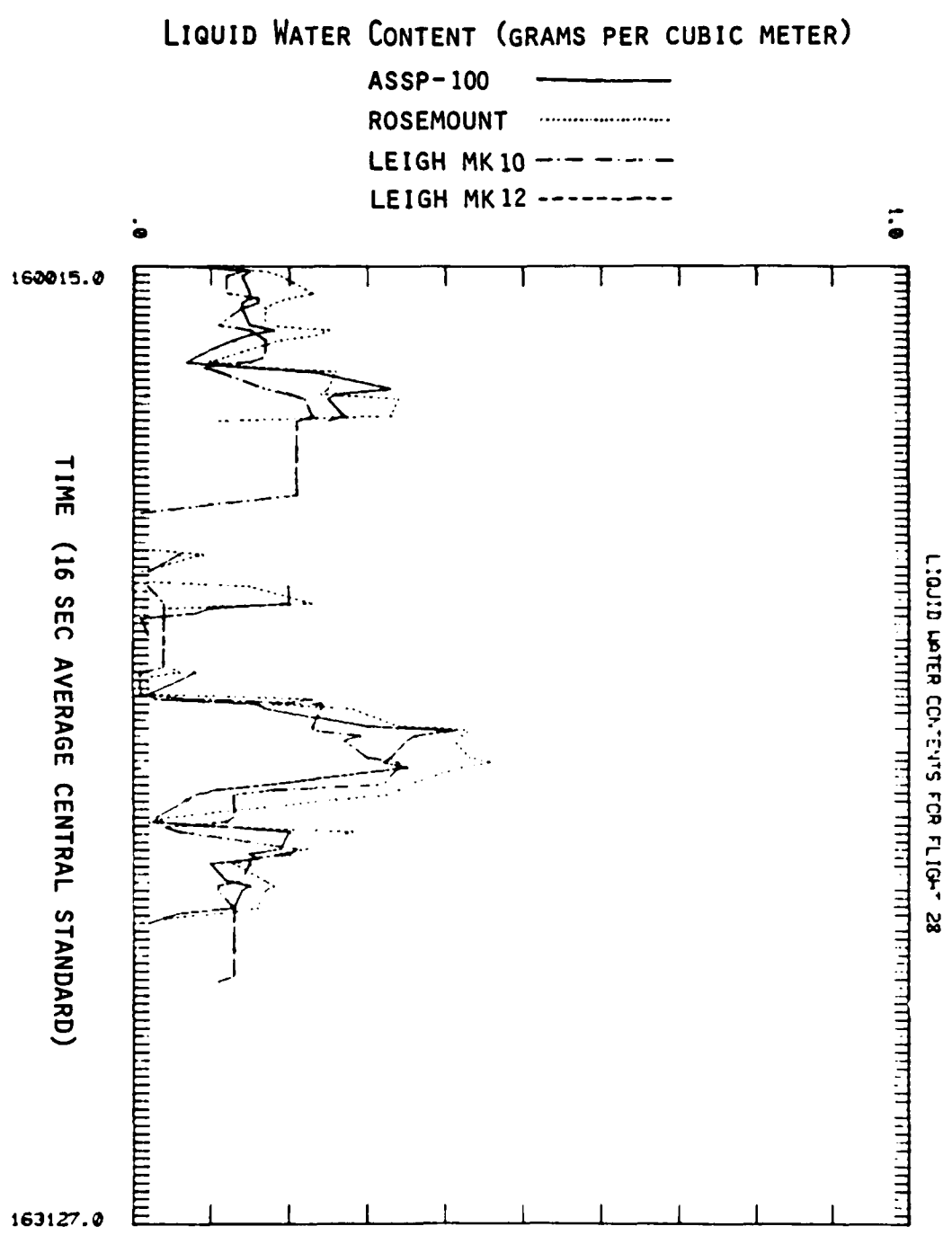
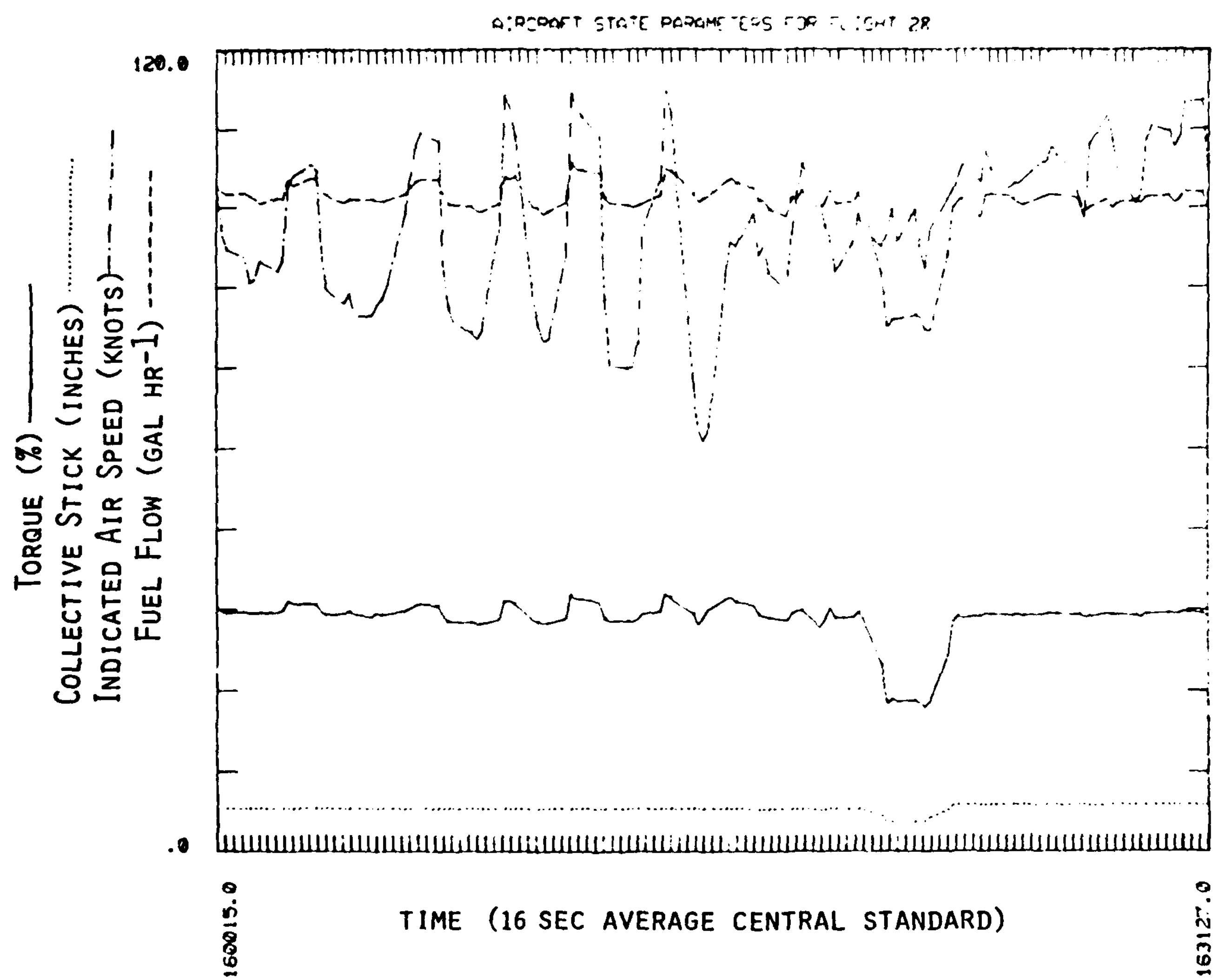
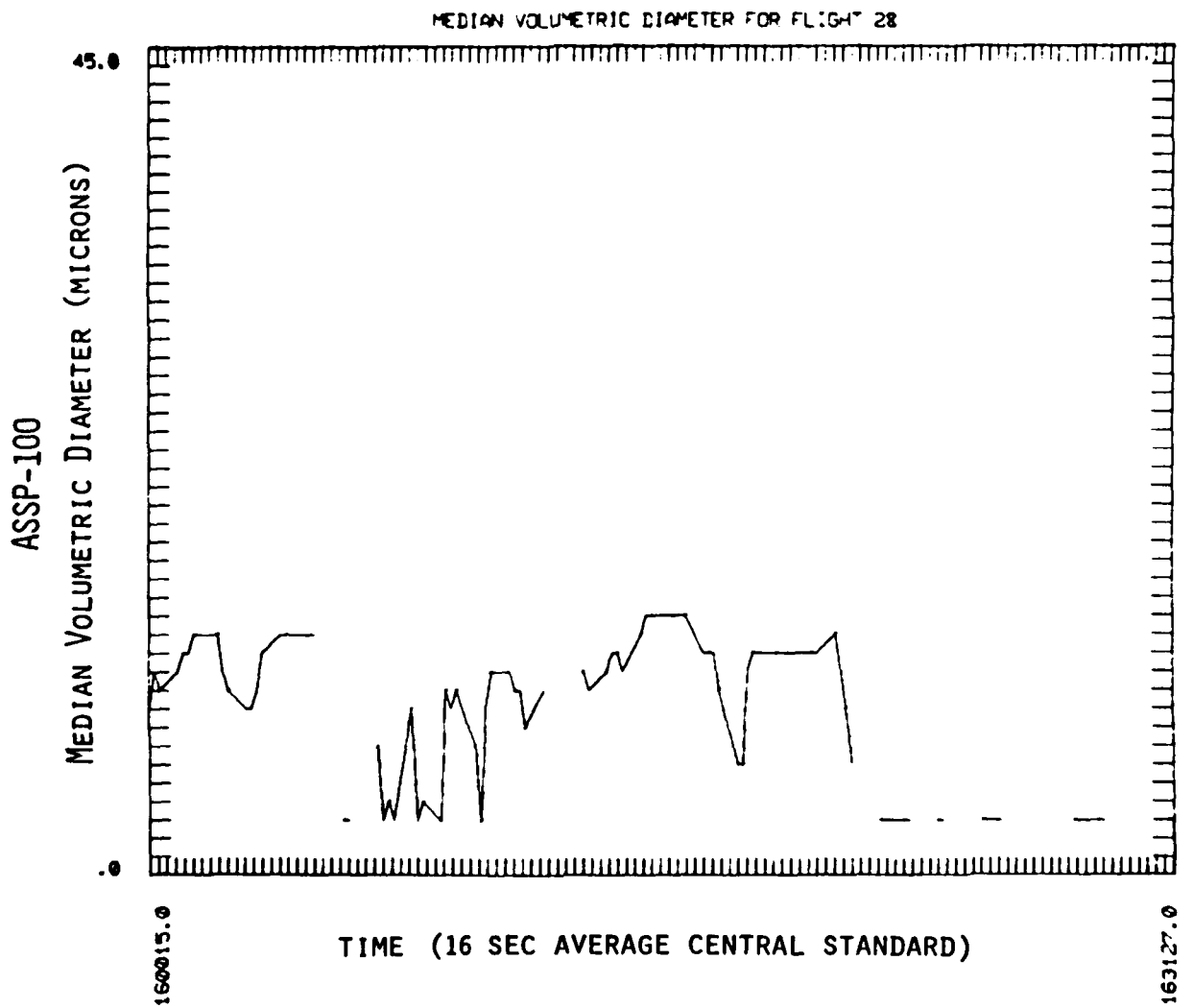
TORQUE (%)
COLLECTIVE STICK (INCHES)
INDICATED AIR SPEED (KNOTS)
FUEL FLOW (GAL HR-1)
150015.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)
155959.0


MEDIAN VOLUMETRIC DIAMETER FOR FLIGHT 28
45.0
.0
ASSP-100
MEDIAN VOLUMETRIC DIAMETER (MICRONS)
150015.0
155959.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)


LIQUID WATER CONTENT (GRAMS PER CUBIC METER)
ASSP-100
ROSEMOUNT
LEIGH MK10
LEIGH MK12
0.
1.0
160015.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)
163127.0
LIQUID WATER CONTENTS FOR FLIGHT 28


AIRCRAFT STATE PARAMETERS FOR FLIGHT 28
120.0
.0
TORQUE (%)
COLLECTIVE STICK (INCHES)
INDICATED AIR SPEED (KNOTS)
FUEL FLOW (GAL HR-1)
160015.0
163127.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)


MEDIAN VOLUMETRIC DIAMETER FOR FLIGHT 28
45.0
.0
ASSP-100
MEDIAN VOLUMETRIC DIAMETER (MICRONS)
160015.0
TIME (16 SEC AVERAGE CENTRAL STANDARD)
163127.0

DATE: 3/26/80 NATURAL ICING ENCOUNTER FLIGHT 28 TAPE RECORD # 1

TIME (LST)	IRU (CNTS)	MK 10 (G/M3)	MK 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
145023	0.	0.00	0.00	11.1	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145039	0.	0.00	0.00	11.2	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145055	0.	0.00	0.00	10.5	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145111	86.	.19	0.00	11.2	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145127	8.	.70	.15	16.9	.16	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145143	0.	.00	.00	29.0	.79	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145159	0.	.00	.00	41.6	.80	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145215	0.	.00	.00	57.3	.07	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145231	0.	.00	.00	69.5	.05	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145247	0.	.00	.00	72.1	.01	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1453 3	0.	.00	0.00	72.1	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145319	0.	.00	0.00	72.1	.03	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145335	0.	.00	.00	72.2	.05	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145351	0.	.00	0.00	72.1	.02	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1454 7	0.	.00	0.00	72.2	0.00	$$$$	39	32767	0	0	0	0	0	1	2	3	5	6	9	12	15	19	23
145423	0.	.00	0.00	72.1	0.00	$$$$	39	32767	0	0	0	0	0	1	2	3	5	6	9	12	15	19	23
145439	0.	.00	0.00	72.1	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145455	0.	.00	0.00	71.6	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145511	0.	.00	0.00	72.2	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145527	0.	.00	0.00	72.1	.04	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145543	0.	.00	.00	72.1	.04	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145559	0.	.00	0.00	50.9	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145615	0.	.00	0.00	15.2	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145631	0.	.00	0.00	10.9	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145647	0.	.00	0.00	8.9	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1457 3	0.	.00	0.00	7.8	.01	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145719	0.	.00	0.00	7.0	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145735	0.	.00	0.00	6.4	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145751	0.	.00	0.00	5.8	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1458 7	0.	.00	0.00	5.3	.03	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145823	0.	.00	0.00	4.7	.03	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145839	0.	.00	0.00	4.6	.04	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145855	0.	.00	0.00	4.3	.03	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145911	0.	.00	0.00	4.5	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145927	0.	.00	0.00	4.6	0.00	$$$$	39	32767	0	0	0	0	0	1	2	3	5	6	9	12	15	19	23
145943	0.	.00	0.00	4.6	.03	$$$$	39	32767	0	0	0	0	0	1	2	3	5	6	9	12	15	19	23
145959	0.	.00	0.00	5.4	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 015	0.	.00	0.00	5.7	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 031	0.	.00	0.00	5.7	.04	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 047	0.	.00	0.00	5.7	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 1 3	0.	.00	.00	5.6	.03	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 119	0.	.00	.00	5.2	.04	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 135	0.	.00	.00	5.5	.02	$$$$	39	32767	0	0	0	0	0	1	2	3	5	6	9	12	15	19	23
15 151	0.	.00	.00	5.4	.02	$$$$	39	32767	0	0	0	0	0	1	2	3	5	6	9	12	15	19	23
15 2 7	0.	.00	.00	5.6	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 223	0.	.00	0.00	5.6	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 239	0.	.00	0.00	5.6	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 255	0.	.00	0.00	5.6	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 311	0.	.00	0.00	5.7	0.00	$$$$	39	32767	0	0	0	0	0	1	2	3	5	6	9	12	15	19	23
15 327	0.	.00	.00	5.6	.02	$$$$	39	32767	0	0	0	0	0	1	2	3	5	6	9	12	15	19	23

DATE: 3/26/80 NATURAL ICING ENCOUNTER FLIGHT 2R TAPE RECORD # 26

TIME (LST)	IRU (CNTS)	MK 10 (G/M3)	MK 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
15 343	0.	.00	.00	5.5	0.00	$$$$	39	32767	0	0	0	0	0	1	2	3	5	6	9	12	15	19	23
15 359	0.	.00	.00	5.6	0.00	$$$$	39	32767	0	0	0	0	0	1	2	3	5	6	9	12	15	19	23
15 415	0.	.00	0.00	5.7	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 431	0.	.00	0.00	5.7	.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 447	0.	.00	0.00	5.8	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 5 3	0.	.00	0.00	5.7	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 519	0.	.00	0.00	5.4	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 535	0.	.00	.00	5.0	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 551	0.	.00	.00	4.5	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 6 7	0.	.00	.00	4.4	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 623	0.	.00	0.00	4.5	0.00	$$$$	39	32767	0	0	0	0	0	1	2	3	5	6	9	12	15	19	23
15 639	0.	.00	0.00	4.4	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 655	0.	.00	0.00	4.5	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 711	0.	.00	0.00	4.4	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 727	0.	.00	0.00	4.3	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 743	0.	.00	0.00	4.2	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 759	0.	.00	0.00	4.2	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 815	0.	.00	0.00	4.2	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 831	0.	.00	0.00	4.0	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 847	0.	.00	0.00	4.1	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 9 3	0.	.00	0.00	3.9	0.00	$$$$	39	32767	0	0	0	0	0	1	2	3	5	6	9	12	15	19	23
15 919	0.	.00	0.00	3.7	.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 935	0.	.00	0.00	3.7	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 951	0.	.00	0.00	3.8	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1510 7	0.	.00	0.00	3.8	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
151023	0.	.00	0.00	3.8	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
151039	0.	.00	0.00	3.9	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
151055	0.	.00	0.00	4.0	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
151111	0.	.00	0.00	3.7	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
151127	0.	.00	0.00	3.4	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
151143	0.	.00	0.00	3.2	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
151159	0.	.00	0.00	3.2	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
151215	0.	.00	0.00	2.9	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
151231	0.	.00	0.00	2.4	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
151247	0.	.00	0.00	1.7	0.00	.00	5	0.	37	56	5	0	0	0	0	0	0	0	0	0	0	0	0
1513 3	0.	.00	0.00	1.1	0.00	.00	6	0.	18	67	18	0	0	0	0	0	0	0	0	0	0	0	0
151319	0.	.00	0.00	.5	0.00	.00	5	23.	25	58	16	0	0	0	0	0	0	0	0	0	0	0	0
151335	0.	.00	.00	.3	0.00	.00	6	23.	18	50	31	0	0	0	0	0	0	0	0	0	0	0	0
151351	0.	.00	.02	.1	0.00	.01	6	149.	14	43	37	3	0	0	0	0	0	0	0	0	0	0	0
1514 7	0.	.00	.01	.0	0.00	.01	5	149.	25	48	25	0	0	0	0	0	0	0	0	0	0	0	0
151423	0.	.00	.01	.0	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
151439	0.	.00	.01	-.0	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
151455	0.	.00	.01	-.2	0.00	.00	5	66.	32	50	16	0	0	0	0	0	0	0	0	0	0	0	0
151511	0.	.00	0.00	-.2	0.00	.00	3	66.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
151527	0.	.00	0.00	-.2	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
151543	0.	.00	0.00	-.4	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
151559	0.	.00	0.00	-.4	0.00	.00	4	4.	43	47	8	0	0	0	0	0	0	0	0	0	0	0	0
151615	0.	.00	0.00	-.4	0.00	.00	3	4.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
151631	0.	.00	0.00	-.3	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
151647	0.	.00	0.00	-.3	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DATE: 3/26/80 NATURAL ICING ENCOUNTER FLIGHT 2A TAPE RECORD # 51

TIME (LST)	IRU (CNTS)	MR 10 (G/M3)	MR 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
1517 3	0.	.00	0.00	-.4	.00	.00	5	0.	28	45	22	3	0	0	0	0	0	0	0	0	0	0	0
151719	0.	.00	0.00	-.3	0.00	.00	6	0.	20	40	32	5	0	0	0	0	0	0	0	0	0	0	0
151735	0.	.00	0.00	-.2	0.00	.00	4	0.	56	43	0	0	0	0	0	0	0	0	0	0	0	0	0
151751	0.	.00	0.00	-.3	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1518 7	0.	.00	0.00	-.3	0.00	.00	5	0.	32	56	10	0	0	0	0	0	0	0	0	0	0	0	0
151823	0.	.00	.00	-.4	.01	.00	8	0.	8	26	45	17	1	0	0	0	0	0	0	0	0	0	0
151839	0.	.00	.10	-.6	.11	.07	9	399.	3	19	47	24	3	0	0	0	0	0	0	0	0	0	0
151855	0.	.00	.26	-.7	.09	.06	8	399.	4	23	48	18	2	0	0	0	0	0	0	0	0	0	0
151911	0.	.01	.39	-.9	.07	.06	8	562.	7	32	46	12	1	0	0	0	0	0	0	0	0	0	0
151927	12.	.07	.05	-1.0	.09	.05	7	562.	8	38	44	8	0	0	0	0	0	0	0	0	0	0	0
151943	12.	.07	.09	-.9	.06	.04	7	436.	7	41	43	7	0	0	0	0	0	0	0	0	0	0	0
151959	12.	.07	.25	-.9	.07	.05	8	436.	6	35	45	11	1	0	0	0	0	0	0	0	0	0	0
152015	12.	.07	.32	-.7	.02	.03	8	264.	5	25	49	17	2	0	0	0	0	0	0	0	0	0	0
152031	12.	.07	.39	-.7	.03	.03	8	264.	5	30	49	13	1	0	0	0	0	0	0	0	0	0	0
152047	28.	.05	.42	-.7	.02	.00	8	44.	9	29	41	15	2	0	0	0	0	0	0	0	0	0	0
1521 3	34.	.05	.13	-.7	.07	.00	8	44.	7	30	46	13	1	0	0	0	0	0	0	0	0	0	0
152119	33.	.05	.09	-.9	.12	.06	8	411.	4	33	47	11	1	0	0	0	0	0	0	0	0	0	0
152135	33.	.05	.32	-1.0	.11	.06	8	411.	4	30	47	14	1	0	0	0	0	0	0	0	0	0	0
152151	63.	.12	.25	-.9	.08	.06	8	440.	4	26	50	15	1	0	0	0	0	0	0	0	0	0	0
1522 7	69.	.12	0.00	-.9	.11	.07	8	440.	3	24	51	17	1	0	0	0	0	0	0	0	0	0	0
152223	69.	.12	.09	-.9	.07	.08	8	609.	4	27	50	15	1	0	0	0	0	0	0	0	0	0	0
152239	69.	.12	.19	-.8	.02	.06	8	609.	8	31	46	11	1	0	0	0	0	0	0	0	0	0	0
152255	70.	.12	.20	-.6	0.00	.00	6	37.	21	38	31	8	0	0	0	0	0	0	0	0	0	0	0
152311	69.	.12	.20	-.5	0.00	.00	4	37.	46	53	0	0	0	0	0	0	0	0	0	0	0	0	0
152327	69.	.12	.19	-.5	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
152343	69.	.12	.20	-.4	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
152359	69.	.12	.22	-.4	0.00	.01	8	97.	8	26	38	19	6	0	0	0	0	0	0	0	0	0	0
152415	69.	.12	.31	-.5	.02	.01	8	97.	5	24	44	19	4	0	0	0	0	0	0	0	0	0	0
152431	80.	.05	.26	-.7	.11	.07	8	495.	4	26	50	15	2	0	0	0	0	0	0	0	0	0	0
152447	87.	.02	0.00	-.8	.12	.08	8	495.	3	26	50	15	2	0	0	0	0	0	0	0	0	0	0
1525 3	87.	.02	.03	-.7	.06	.07	8	535.	5	27	48	15	2	0	0	0	0	0	0	0	0	0	0
152519	87.	.02	.09	-.7	.05	.07	8	535.	5	31	48	12	1	0	0	0	0	0	0	0	0	0	0
152535	87.	.02	.20	-.8	.04	.06	7	692.	10	39	41	7	1	0	0	0	0	0	0	0	0	0	0
152551	87.	.02	.28	-.9	.08	.10	8	692.	4	27	51	13	1	0	0	0	0	0	0	0	0	0	0
1526 7	87.	.02	.37	-1.1	.00	.01	7	94.	16	31	33	15	3	0	0	0	0	0	0	0	0	0	0
152623	87.	.02	.37	-1.2	0.00	.01	8	94.	12	26	38	19	3	0	0	0	0	0	0	0	0	0	0
152639	88.	.02	.39	-1.5	0.00	.01	7	149.	14	31	30	18	4	0	0	0	0	0	0	0	0	0	0
152655	99.	.03	.18	-1.8	0.00	.04	11	149.	2	10	27	36	17	2	1	0	0	0	0	0	0	0	0
152711	99.	.03	.23	-2.1	0.00	.26	12	568.	0	5	23	39	24	4	2	0	0	0	0	0	0	0	0
152727	111.	.20	.44	-2.3	.02	.14	11	568.	2	10	28	38	17	1	0	0	0	0	0	0	0	0	0
152743	113.	.21	.22	-2.2	.07	.00	11	4.	1	7	24	38	23	5	1	0	0	0	0	0	0	0	0
152759	113.	.21	.13	-2.2	.16	.00	11	4.	1	8	26	36	20	4	2	0	0	0	0	0	0	0	0
152815	113.	.21	.34	-2.2	.09	.09	10	443.	3	15	34	29	13	2	1	0	0	0	0	0	0	0	0
152831	143.	.11	.14	-2.1	.17	.14	10	443.	1	10	36	34	13	2	1	0	0	0	0	0	0	0	0
152847	147.	.11	.12	-2.0	.07	.00	10	20.	2	13	34	28	14	4	1	0	0	0	0	0	0	0	0
1529 3	148.	.12	.31	-1.9	.18	.01	11	20.	0	8	27	31	22	7	2	0	0	0	0	0	0	0	0
152919	161.	.14	.11	-1.9	.22	.20	13	411.	0	4	16	29	30	13	3	0	0	0	0	0	0	0	0
152935	170.	.16	.22	-2.0	.22	.18	13	411.	1	5	17	28	29	12	4	0	0	0	0	0	0	0	0
152951	185.	.18	.14	-1.8	.22	.13	12	346.	1	6	19	30	28	10	2	0	0	0	0	0	0	0	0
1530 7	192.	.16	.24	-2.0	.21	.16	12	346.	0	5	20	32	27	10	3	0	0	0	0	0	0	0	0

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TIME (LST)	IRU (CNTS)	MK 10 (G/M3)	MK 12 (G/M3)	OAT (C)	KSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
153023	208.	.14	.21	-2.0	.19	.20	13	414.	0	4	16	29	31	12	4	0	0	0	0	0	0	0	0
153039	225.	.18	.17	-1.9	.19	.15	12	414.	1	6	19	29	27	10	3	0	0	0	0	0	0	0	0
153055	233.	.19	.28	-2.0	.27	.19	12	453.	0	6	22	30	25	10	3	0	0	0	0	0	0	0	0
153111	260.	.20	.15	-2.0	.30	.22	12	453.	0	5	22	32	25	9	3	0	0	0	0	0	0	0	0
153127	275.	.21	.18	-2.0	.29	.21	12	429.	0	5	19	30	28	12	3	0	0	0	0	0	0	0	0
153143	289.	.23	.23	-2.1	.35	.24	13	429.	0	4	15	28	31	14	4	0	0	0	0	0	0	0	0
153159	313.	.26	.19	-2.1	.35	.23	13	402.	0	4	16	30	30	12	3	0	0	0	0	0	0	0	0
153215	331.	.22	.12	-2.0	.34	.23	13	402.	0	4	16	30	31	12	4	0	0	0	0	0	0	0	0
153231	348.	.21	.28	-2.1	.31	.17	12	321.	0	4	18	31	28	11	3	0	0	0	0	0	0	0	0
153247	365.	.21	.11	-2.1	.26	.17	12	321.	0	4	19	31	28	10	3	0	0	0	0	0	0	0	0
1533 3	380.	.22	.19	-2.0	.27	.31	11	720.	0	6	28	33	20	6	2	0	0	0	0	0	0	0	0
153319	393.	.23	.28	-2.0	.28	.38	12	720.	0	4	18	32	28	10	4	0	0	0	0	0	0	0	0
153335	417.	.20	.13	-2.1	.33	.23	12	458.	0	5	21	32	26	10	4	0	0	0	0	0	0	0	0
153351	436.	.25	.14	-2.1	.33	.22	12	458.	0	5	22	34	24	8	3	0	0	0	0	0	0	0	0
1534 7	450.	.26	.29	-2.1	.31	.22	12	439.	0	4	19	32	27	10	3	0	0	0	0	0	0	0	0
153423	474.	.25	.11	-2.2	.24	.19	12	439.	0	6	22	32	25	9	3	0	0	0	0	0	0	0	0
153439	490.	.23	.19	-2.1	.27	.24	12	539.	0	6	23	33	24	7	3	0	0	0	0	0	0	0	0
153455	507.	.22	.26	-2.1	.31	.25	12	539.	0	5	23	33	24	7	3	0	0	0	0	0	0	0	0
153511	527.	.23	.07	-2.2	.16	.09	11	396.	3	11	23	30	23	6	1	0	0	0	0	0	0	0	0
153527	528.	.23	.25	-2.0	.16	.16	12	396.	1	6	22	34	26	6	2	0	0	0	0	0	0	0	0
153543	547.	.14	.12	-1.7	.15	.14	11	404.	1	8	30	33	19	4	1	0	0	0	0	0	0	0	0
153559	551.	.13	.03	-1.3	.02	.08	10	404.	3	12	28	32	18	2	1	0	0	0	0	0	0	0	0
153615	551.	.13	.11	-.7	.05	.10	11	333.	1	8	24	36	23	4	1	0	0	0	0	0	0	0	0
153631	551.	.13	.18	-.6	.03	.12	12	333.	1	7	22	38	24	4	2	0	0	0	0	0	0	0	0
153647	551.	.13	.17	-.4	.02	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1537 3	551.	.13	.16	.0	.01	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
153719	551.	.13	.15	.5	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
153735	551.	.13	.14	.7	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
153751	551.	.13	.14	.9	.00	.00	7	0.	11	38	37	9	3	0	0	0	0	0	0	0	0	0	0
1538 7	551.	.13	.15	1.1	0.00	.00	9	0.	5	19	39	34	0	0	0	0	0	0	0	0	0	0	0
153823	551.	.13	.14	1.4	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
153839	551.	.01	.13	1.9	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
153855	551.	.00	.11	1.8	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
153911	551.	.00	.10	1.4	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
153927	551.	.00	.09	1.2	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
153943	551.	.00	.07	.8	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
153959	551.	.00	.06	.7	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
154015	551.	.00	.06	.7	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
154031	551.	.00	.04	.8	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
154047	551.	.00	.03	.9	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1541 3	551.	.00	.02	.8	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
154119	551.	.00	.01	.7	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
154135	551.	.00	.00	.5	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
154151	551.	.00	.00	.2	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1542 7	551.	.00	0.00	.1	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
154223	551.	.00	0.00	.1	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
154239	551.	.00	0.00	.2	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
154255	551.	.00	0.00	.1	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
154311	551.	.00	0.00	.1	0.00	.00	8	0.	7	20	45	26	0	0	0	0	0	0	0	0	0	0	0
154327	551.	.00	0.00	-.1	0.00	.00	7	0.	16	35	33	14	0	0	0	0	0	0	0	0	0	0	0

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TIME (LST)	IRU (CNTS)	MK 10 (G/M3)	MK 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
154343	551.	.00	.01	-.3	.01	.00	8	30.	10	29	36	17	5	0	0	0	0	0	0	0	0	0	0
154359	551.	.00	.03	-.6	.01	.00	9	30.	5	17	32	28	13	2	0	0	0	0	0	0	0	0	0
154415	551.	.00	.13	-.9	.10	.12	11	475.	2	11	30	33	18	3	1	0	0	0	0	0	0	0	0
154431	551.	.00	.27	-1.0	.04	.06	8	475.	7	24	37	22	7	0	0	0	0	0	0	0	0	0	0
154447	551.	.00	.33	-1.0	.04	.08	10	410.	3	15	30	27	17	3	1	0	0	0	0	0	0	0	0
1545 3	553.	.01	.16	-1.1	.16	.18	12	410.	0	6	21	33	27	8	2	0	0	0	0	0	0	0	0
154519	556.	.06	.16	-1.2	.24	.22	12	422.	0	4	18	33	28	10	3	0	0	0	0	0	0	0	0
154535	585.	.22	.05	-1.3	.24	.23	12	422.	0	4	18	32	29	10	3	0	0	0	0	0	0	0	0
154551	592.	.22	.25	-1.3	.24	.20	12	426.	0	5	18	31	28	11	3	0	0	0	0	0	0	0	0
1546 7	614.	.21	.19	-1.4	.27	.23	13	426.	0	4	15	30	31	12	4	0	0	0	0	0	0	0	0
154623	635.	.22	.16	-1.6	.26	.28	13	565.	0	4	15	29	30	12	4	0	0	0	0	0	0	0	0
154639	650.	.23	.22	-1.7	.25	.24	12	565.	0	6	23	29	24	9	3	0	0	0	0	0	0	0	0
154655	667.	.24	.24	-1.7	.24	.23	12	529.	0	6	22	32	25	8	3	0	0	0	0	0	0	0	0
154711	688.	.20	.09	-1.7	.24	.26	12	529.	0	5	18	32	29	10	3	0	0	0	0	0	0	0	0
154727	696.	.21	.27	-1.7	.27	.23	12	481.	0	5	18	33	28	9	3	0	0	0	0	0	0	0	0
154743	720.	.23	.17	-1.7	.27	.23	12	481.	0	5	20	32	27	9	3	0	0	0	0	0	0	0	0
154759	736.	.21	.18	-1.7	.23	.20	12	441.	0	6	22	32	25	8	2	0	0	0	0	0	0	0	0
154815	750.	.21	.24	-1.7	.29	.25	13	441.	0	4	17	32	30	10	3	0	0	0	0	0	0	0	0
154831	771.	.23	.22	-1.8	.33	.30	13	488.	0	3	16	32	31	11	3	0	0	0	0	0	0	0	0
154847	796.	.30	.20	-1.9	.32	.30	13	488.	0	3	14	32	32	11	4	0	0	0	0	0	0	0	0
1549 3	821.	.33	.18	-1.9	.33	.34	13	560.	0	3	14	32	32	12	4	0	0	0	0	0	0	0	0
154919	844.	.33	.14	-2.0	.40	.33	13	560.	0	3	15	32	31	11	4	0	0	0	0	0	0	0	0
154935	867.	.34	.14	-2.0	.38	.32	13	610.	0	4	16	33	30	10	3	0	0	0	0	0	0	0	0
154951	884.	.30	.20	-2.0	.34	.32	12	610.	0	4	17	34	29	9	3	0	0	0	0	0	0	0	0
1550 7	904.	.30	.17	-2.0	.35	.31	12	554.	0	4	18	35	28	9	3	0	0	0	0	0	0	0	0
155023	918.	.32	.24	-1.9	.34	.28	12	554.	0	4	19	36	27	7	2	0	0	0	0	0	0	0	0
155039	937.	.28	.11	-2.0	.29	.21	12	493.	1	5	19	35	27	7	2	0	0	0	0	0	0	0	0
155055	938.	.28	.28	-2.0	.07	.10	11	493.	3	10	20	33	24	6	1	0	0	0	0	0	0	0	0
155111	654.	.14	.15	-2.0	.27	.25	13	436.	0	3	13	31	33	12	3	0	0	0	0	0	0	0	0
155127	1.	.11	.25	-2.0	.27	.22	13	436.	0	4	16	32	31	10	3	0	0	0	0	0	0	0	0
155143	26.	.22	.19	-2.1	.34	.27	12	521.	0	4	18	33	28	10	3	0	0	0	0	0	0	0	0
155159	48.	.27	.17	-2.2	.31	.26	12	521.	0	4	17	33	29	9	3	0	0	0	0	0	0	0	0
155215	70.	.28	.17	-2.3	.33	.30	12	575.	0	4	16	33	29	10	3	0	0	0	0	0	0	0	0
155231	89.	.27	.22	-2.3	.31	.26	12	575.	0	5	19	33	27	9	3	0	0	0	0	0	0	0	0
155247	105.	.24	.23	-2.3	.30	.23	12	545.	1	6	17	30	29	10	3	0	0	0	0	0	0	0	0
1553 3	131.	.25	.18	-2.3	.38	.28	13	545.	0	4	15	30	31	12	4	0	0	0	0	0	0	0	0
155319	155.	.30	.14	-2.4	.32	.21	11	554.	0	7	27	31	20	7	3	0	0	0	0	0	0	0	0
155335	170.	.25	.21	-2.4	.28	.25	12	554.	0	6	22	28	25	11	4	0	0	0	0	0	0	0	0
155351	186.	.22	.25	-2.3	.30	.20	13	446.	1	4	13	26	31	15	4	0	0	0	0	0	0	0	0
1554 7	208.	.25	.10	-2.3	.29	.12	10	446.	1	12	34	26	15	6	2	0	0	0	0	0	0	0	0
155423	208.	.24	.33	-2.2	.28	.14	10	557.	2	13	35	29	14	5	1	0	0	0	0	0	0	0	0
155439	230.	.13	.12	-2.1	.24	.09	9	557.	4	17	35	25	12	3	1	0	0	0	0	0	0	0	0
155455	232.	.13	.11	-1.8	.07	.04	9	320.	6	23	39	20	7	1	0	0	0	0	0	0	0	0	0
155511	232.	.13	.22	-1.7	.06	.04	8	320.	7	28	39	15	6	1	0	0	0	0	0	0	0	0	0
155527	235.	.12	.38	-1.9	.11	.12	10	529.	2	14	33	25	16	5	2	0	0	0	0	0	0	0	0
155543	252.	.07	.04	-1.7	.18	.21	13	529.	1	5	14	29	32	12	3	0	0	0	0	0	0	0	0
155559	252.	.07	.27	-2.0	.28	.20	13	456.	1	5	13	28	34	13	3	0	0	0	0	0	0	0	0
155615	266.	.19	.44	-1.9	.06	.05	8	456.	6	30	44	13	4	0	0	0	0	0	0	0	0	0	0
155631	268.	.19	.44	-1.9	.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155647	268.	.19	.12	-2.2	.01	.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DATE: 3/26/80 NATURAL ICING ENCOUNTER FLIGHT 2A TAPE RECORD # 126

TIME (LST)	IRU (CNTS)	MR 10 (G/M3)	MR 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
1557 3	289.	.20	.25	-2.3	.00	.15	11	435.	1	8	25	30	22	8	2	0	0	0	0	0	0	0	0
155719	327.	.21	.18	-2.3	.01	.17	11	435.	0	7	26	32	21	7	3	0	0	0	0	0	0	0	0
155735	344.	.20	.18	-2.3	.27	.19	11	438.	0	6	28	34	20	6	2	0	0	0	0	0	0	0	0
155751	360.	.21	.28	-2.3	.29	.22	12	438.	0	5	20	34	26	9	3	0	0	0	0	0	0	0	0
1558 7	379.	.22	.14	-2.2	.25	.21	12	500.	0	6	23	33	24	8	3	0	0	0	0	0	0	0	0
155823	393.	.21	.21	-2.3	.26	.22	12	500.	0	6	22	31	24	10	3	0	0	0	0	0	0	0	0
155839	405.	.20	.18	-2.2	.17	.11	11	336.	1	9	25	27	23	8	3	0	0	0	0	0	0	0	0
155855	412.	.17	.32	-2.1	.15	.09	10	336.	2	13	32	25	17	6	2	0	0	0	0	0	0	0	0
155911	428.	.13	.12	-2.2	.14	.16	11	487.	1	10	29	27	19	8	2	0	0	0	0	0	0	0	0
155927	435.	.14	.28	-2.2	.14	.17	11	487.	1	8	28	30	19	7	2	0	0	0	0	0	0	0	0
155943	454.	.16	.17	-2.2	.22	.16	10	492.	1	10	39	31	12	3	1	0	0	0	0	0	0	0	0
155959	462.	.15	.26	-2.1	.18	.14	10	492.	1	12	36	25	14	6	2	0	0	0	0	0	0	0	0
16 015	476.	.14	.11	-2.1	.10	.08	9	465.	4	19	35	20	12	5	2	0	0	0	0	0	0	0	0
16 031	476.	.14	.29	-1.9	.17	.15	11	465.	1	9	28	29	19	8	3	0	0	0	0	0	0	0	0
16 047	496.	.12	.18	-2.0	.19	.14	10	440.	1	9	34	32	14	4	2	0	0	0	0	0	0	0	0
16 1 3	500.	.12	.27	-2.0	.23	.15	11	440.	1	9	30	31	18	6	3	0	0	0	0	0	0	0	0
16 119	521.	.16	.14	-2.0	.20	.15	12	366.	1	6	20	29	24	11	4	0	0	0	0	0	0	0	0
16 135	525.	.16	.22	-2.0	.18	.14	12	366.	1	6	18	29	28	11	3	0	0	0	0	0	0	0	0
16 151	534.	.14	.26	-2.1	.17	.14	13	364.	1	6	18	27	27	13	4	0	0	0	0	0	0	0	0
16 2 7	547.	.11	.19	-2.2	.17	.15	13	364.	1	6	18	27	26	13	5	0	0	0	0	0	0	0	0
16 223	560.	.15	.20	-2.3	.25	.18	13	429.	1	5	17	26	27	14	5	0	0	0	0	0	0	0	0
16 239	571.	.16	.27	-2.1	.24	.15	11	429.	1	9	27	29	20	9	3	0	0	0	0	0	0	0	0
16 255	589.	.17	.13	-2.1	.19	.13	10	485.	1	13	34	25	15	6	2	0	0	0	0	0	0	0	0
16 311	593.	.17	.22	-1.9	.12	.08	9	485.	3	21	44	19	6	2	1	0	0	0	0	0	0	0	0
16 327	596.	.15	.37	-1.7	.10	.07	9	479.	5	20	34	19	13	5	2	0	0	0	0	0	0	0	0
16 343	612.	.09	.14	-1.7	.15	.13	10	479.	1	13	39	29	11	3	1	0	0	0	0	0	0	0	0
16 359	615.	.11	.29	-1.8	.26	.23	12	586.	1	7	24	29	22	10	4	0	0	0	0	0	0	0	0
16 415	640.	.17	.14	-1.9	.25	.33	13	586.	0	4	15	27	30	15	5	0	0	0	0	0	0	0	0
16 431	655.	.20	.20	-1.9	.24	.26	13	419.	0	3	15	27	30	15	5	0	0	0	0	0	0	0	0
16 447	671.	.22	.23	-2.1	.34	.25	13	419.	0	4	19	28	28	13	5	0	0	0	0	0	0	0	0
16 5 3	689.	.23	.20	-2.2	.33	.27	13	456.	0	3	14	28	32	15	4	0	0	0	0	0	0	0	0
16 519	707.	.21	.22	-2.3	.11	.25	13	456.	0	4	14	27	31	15	5	0	0	0	0	0	0	0	0
16 535	714.	.21	0.00	-2.3	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16 551	714.	.21	0.00	-2.3	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16 6 7	714.	.21	0.00	-2.3	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16 623	714.	.21	0.00	-2.2	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16 639	714.	.21	0.00	-1.9	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16 655	714.	.21	0.00	-1.7	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16 711	714.	.21	0.00	-1.4	0.00	.00	7	0.	20	33	25	20	0	0	0	0	0	0	0	0	0	0	0
16 727	714.	.21	0.00	-1.5	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16 743	714.	.21	0.00	-1.6	0.00	.00	4	21.	48	51	0	0	0	0	0	0	0	0	0	0	0	0	0
16 759	714.	.21	0.00	-1.6	0.00	.00	3	21.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16 815	714.	.01	.02	-1.8	.00	.00	9	0.	6	23	34	18	12	3	0	0	0	0	0	0	0	0	0
16 831	714.	.00	.01	-2.0	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16 847	714.	.00	.00	-2.1	0.00	.00	4	0.	50	49	0	0	0	0	0	0	0	0	0	0	0	0	0
16 9 3	714.	.00	0.00	-2.2	.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16 919	714.	.00	.00	-1.9	.00	.00	10	0.	6	16	28	24	16	6	0	0	0	0	0	0	0	0	0
16 935	714.	.00	.04	-1.7	.02	.00	9	0.	7	19	29	24	15	4	0	0	0	0	0	0	0	0	0
16 951	714.	.00	.14	-1.6	.09	.06	10	293.	3	13	30	27	17	5	1	0	0	0	0	0	0	0	0
1610 7	714.	.00	.21	-1.7	.01	.02	7	293.	14	32	33	14	4	0	0	0	0	0	0	0	0	0	0

DATE: 3/26/80 NATURAL ICING ENCOUNTER FLIGHT 28 TAPE RECORD # 151

TIME (LST)	IRU (CNTS)	MR 10 (G/M3)	MR 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
161023	714.	.00	.20	-1.6	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
161039	714.	.00	.23	-1.8	.02	.00	9	0.	3	18	45	22	7	1	0	0	0	0	0	0	0	0	0
161055	718.	.02	.30	-2.0	.15	.20	11	580.	1	8	26	32	23	6	2	0	0	0	0	0	0	0	0
161111	728.	.04	.18	-2.2	.23	.20	11	580.	1	9	27	27	23	7	2	0	0	0	0	0	0	0	0
161127	728.	.04	.34	-1.9	.04	.10	10	532.	3	15	29	25	18	5	1	0	0	0	0	0	0	0	0
161143	728.	.04	.35	-1.6	0.00	.08	10	532.	5	14	26	33	19	0	0	0	0	0	0	0	0	0	0
161159	728.	.04	.36	-1.3	0.00	.01	8	86.	13	21	31	24	9	0	0	0	0	0	0	0	0	0	0
161215	728.	.04	.37	-1.0	0.00	.02	10	86.	2	11	32	34	16	3	0	0	0	0	0	0	0	0	0
161231	728.	.04	.37	-1.1	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
161247	728.	.04	.35	-1.0	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1613 3	728.	.04	.34	-1.0	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
161319	728.	.04	.36	-1.2	.05	.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
161335	735.	.01	.10	-1.5	.06	.08	11	253.	1	9	25	36	22	4	0	0	0	0	0	0	0	0	0
161351	735.	.01	.02	-1.6	.02	.07	10	253.	2	10	31	37	16	2	0	0	0	0	0	0	0	0	0
1614 7	735.	.01	.07	-1.7	.02	.02	11	68.	1	8	24	35	23	4	2	0	0	0	0	0	0	0	0
161423	737.	.07	.28	-1.3	.23	.03	12	68.	0	5	21	35	26	7	2	0	0	0	0	0	0	0	0
161439	749.	.24	.09	-1.2	.18	.16	12	446.	1	6	23	35	22	6	2	0	0	0	0	0	0	0	0
161455	761.	.24	.23	-1.3	.28	.17	11	446.	0	7	32	38	15	3	2	0	0	0	0	0	0	0	0
161511	779.	.23	.27	-1.4	.34	.30	13	477.	0	3	16	34	28	10	4	0	0	0	0	0	0	0	0
161527	803.	.23	.17	-1.2	.43	.41	14	477.	0	1	9	28	36	16	5	0	0	0	0	0	0	0	0
161543	823.	.29	.18	-1.1	.42	.36	14	411.	0	1	9	26	37	17	5	0	0	0	0	0	0	0	0
161559	841.	.27	.20	-1.2	.41	.35	14	411.	0	1	9	25	38	18	5	0	0	0	0	0	0	0	0
161615	861.	.30	.20	-1.8	.43	.33	14	450.	0	2	12	25	33	17	6	0	0	0	0	0	0	0	0
161631	886.	.34	.19	-2.3	.46	.32	14	450.	0	3	14	25	31	17	6	0	0	0	0	0	0	0	0
161647	906.	.34	.19	-2.5	.42	.35	14	463.	0	2	10	24	35	18	6	0	0	0	0	0	0	0	0
1617 3	916.	.32	.26	-2.4	.35	.17	12	463.	1	7	19	28	28	10	2	0	0	0	0	0	0	0	0
161719	924.	.18	.28	-2.4	.34	.11	12	396.	2	8	17	28	29	11	2	0	0	0	0	0	0	0	0
161735	929.	.13	.10	-2.4	.33	.08	12	396.	4	10	16	25	28	11	3	0	0	0	0	0	0	0	0
161751	929.	.13	.23	-2.3	.26	.07	10	451.	4	19	30	21	16	5	1	0	0	0	0	0	0	0	0
1618 7	929.	.13	.34	-2.3	.05	.03	6	451.	16	52	28	2	0	0	0	0	0	0	0	0	0	0	0
161823	929.	.12	.39	-2.3	.02	.03	6	471.	16	48	29	4	0	0	0	0	0	0	0	0	0	0	0
161839	939.	.04	.14	-2.4	.11	.12	11	471.	2	13	25	21	22	10	3	0	0	0	0	0	0	0	0
161855	939.	.06	.29	-2.5	.28	.20	12	495.	0	7	23	25	24	12	5	0	0	0	0	0	0	0	0
161911	957.	.21	.09	-2.6	.22	.19	12	495.	1	8	26	26	22	10	3	0	0	0	0	0	0	0	0
161927	959.	.20	.32	-2.4	.19	.15	12	451.	1	9	25	25	22	10	4	0	0	0	0	0	0	0	0
161943	970.	.15	.08	-2.3	.15	.16	12	451.	1	8	22	27	26	11	2	0	0	0	0	0	0	0	0
161959	19.	.15	.18	-2.3	.13	.10	12	331.	2	8	19	26	26	12	3	0	0	0	0	0	0	0	0
162015	5.	.14	.34	-2.3	.17	.12	12	331.	1	7	20	27	26	12	3	0	0	0	0	0	0	0	0
162031	24.	.11	.10	-2.5	.18	.15	12	420.	1	8	25	27	22	10	3	0	0	0	0	0	0	0	0
162047	24.	.11	.32	-2.3	.17	.14	12	420.	1	8	22	28	24	10	4	0	0	0	0	0	0	0	0
1621 3	45.	.13	.14	-2.2	.16	.13	13	348.	1	6	16	27	29	13	4	0	0	0	0	0	0	0	0
162119	48.	.13	.19	-1.7	.12	.06	11	348.	5	14	22	27	23	6	1	0	0	0	0	0	0	0	0
162135	48.	.13	.28	-1.3	.04	.04	9	389.	8	21	29	24	12	2	1	0	0	0	0	0	0	0	0
162151	48.	.13	.30	-.8	0.00	.02	6	389.	21	35	26	15	0	0	0	0	0	0	0	0	0	0	0
1622 7	48.	.13	.29	-.2	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162223	48.	.13	.28	.3	.02	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162239	48.	.13	.28	.7	.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162255	48.	.13	.27	1.5	.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162311	48.	.13	.27	1.9	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162327	48.	.13	.26	1.4	.04	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DATE: 3/26/80 NATURAL ICING ENCOUNTER FLIGHT 28 TAPE RECORD # 176

TIME (LST)	IRU (CNTS)	MR 10 (G/M3)	MR 12 (G/M3)	OAT (C)	RSMT (G/M3)	ASP (G/M3)	MVD (MU)	NUM (N/CM3)	% MASS CONTRIBUTION BY SIZE CLASS (DIAMETER MICRONS) 3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
162343	48.	.11	.25	1.7	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162359	48.	.00	.24	1.4	.02	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162415	47.	.00	.23	1.3	.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162431	48.	.00	.22	1.5	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162447	48.	.00	.22	1.5	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1625 3	48.	.00	.21	1.4	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162519	48.	.00	.20	1.5	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162535	48.	.00	.19	1.7	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162551	48.	.00	.18	1.5	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1626 7	48.	.00	.17	1.6	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162623	48.	.00	.16	1.7	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162639	48.	.00	.15	1.8	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162655	48.	.00	.14	1.7	0.00	$$$$	39	32767	0	0	0	0	0	1	2	3	5	6	9	12	15	19	23
162711	48.	.00	.13	1.8	0.00	$$$$	39	32767	0	0	0	0	0	1	2	3	5	6	9	12	15	19	23
162727	48.	.00	.12	1.6	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162743	48.	.00	.11	1.5	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162759	48.	.00	.10	1.7	.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162815	48.	.00	.09	1.4	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162831	48.	.00	.08	1.3	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162847	48.	.00	.07	1.6	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 3	48.	.00	.06	1.5	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162919	48.	.00	.05	1.4	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162935	48.	.00	.03	1.6	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162951	48.	.00	.02	1.6	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1630 7	48.	.00	.02	1.6	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
163023	4.	.00	.01	1.7	0.00	0.00	0	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
163039	0.	.00	.01	1.7	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
163055	0.	.00	.02	2.0	0.00	$$$$	39	32767	0	0	0	0	0	1	2	3	5	6	9	12	15	19	23
163111	0.	.00	.02	2.4	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
163127	0.	.00	.01	2.2	0.00	.00	3	0.	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NATURAL ICING ENCOUNTER FLIGHT 2A
AIRCRAFT STATE PARAMETERS (JUH-1H 318)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
145023	13.6	616.	.29	66.9	8.6
145039	13.6	616.	.29	67.6	7.6
145055	13.4	617.	.29	67.0	6.8
145111	13.5	617.	.29	67.1	6.9
145127	13.6	617.	.29	67.6	6.7
145143	13.7	617.	.29	67.2	6.0
145159	13.8	617.	.29	67.9	6.6
145215	13.7	617.	.29	67.6	7.4
145231	13.6	617.	.29	66.9	7.0
145247	13.5	619.	.29	67.3	6.8
1453 3	13.3	617.	.29	66.7	7.0
145319	13.0	617.	.29	66.0	7.7
145335	12.9	619.	.29	66.3	7.5
145351	16.8	604.	2.45	74.9	5.4
1454 7	34.3	571.	6.15	99.7	6.0
145423	35.6	575.	6.30	100.6	6.6
145439	35.9	582.	6.27	100.1	5.9
145455	32.1	612.	5.76	94.4	6.9
145511	33.5	577.	6.00	96.9	4.7
145527	34.9	565.	6.21	99.4	5.9
145543	35.1	567.	6.22	99.4	5.6
145559	45.1	581.	7.30	114.3	47.8
145615	46.5	725.	7.51	115.2	-21.8
145631	47.1	920.	7.51	115.5	-74.2
145647	46.6	1159.	7.51	114.1	-114.
1457 3	46.7	1372.	7.49	114.6	-178.
145719	46.2	1596.	7.48	113.4	93.7
145735	45.7	1816.	7.48	112.2	90.5
145751	45.5	1993.	7.48	111.6	91.3
1458 7	44.7	2182.	7.48	110.6	90.1
145823	43.2	2302.	7.48	108.6	96.3
145839	45.3	2364.	7.48	111.2	107.3
145855	45.0	2393.	7.48	109.9	108.7
145911	47.0	2395.	7.48	113.0	116.9
145927	47.1	2353.	7.44	112.3	117.6
145943	40.8	2332.	6.65	104.2	118.0
145959	36.2	2148.	6.12	98.2	120.1
15 015	35.2	2001.	6.12	97.2	112.7
15 031	35.6	1947.	6.12	94.7	97.0
15 047	37.0	2018.	6.57	100.4	88.4
15 1 3	36.3	2060.	6.68	101.9	94.1
15 119	37.6	2056.	6.68	101.9	108.6
15 135	39.3	2047.	6.68	103.3	110.1
15 151	39.2	2029.	6.68	103.2	107.6
15 2 7	39.1	1951.	6.67	103.6	109.8
15 223	39.0	2008.	6.68	103.1	104.8
15 239	39.3	2033.	6.68	103.5	110.7
15 255	39.3	2012.	6.62	103.5	114.1
15 311	35.8	1983.	6.33	98.4	102.4
15 327	35.6	2035.	6.34	97.5	98.3

NATURAL ICING ENCOUNTER FLIGHT 28
AIRCRAFT STATE PARAMETERS (JUN-1M 318)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
15 343	35.7	2077.	6.34	97.8	99.8
15 359	35.7	1995.	6.33	98.6	100.4
15 415	36.0	1976.	6.33	98.4	101.8
15 431	35.7	1943.	6.33	95.7	100.6
15 447	36.0	1937.	6.40	99.0	95.4
15 5 3	40.5	2016.	6.96	104.2	88.6
15 519	40.5	2249.	6.97	104.3	78.8
15 535	40.1	2459.	6.98	102.6	76.3
15 551	40.6	2519.	6.97	104.4	95.6
15 6 7	37.4	2470.	6.41	100.1	111.6
15 623	36.1	2388.	6.29	98.0	110.3
15 639	34.9	2355.	6.29	96.5	95.8
15 655	36.2	2366.	6.47	98.4	93.3
15 711	36.5	2442.	6.54	98.3	89.1
15 727	36.7	2502.	6.54	98.4	90.7
15 743	36.7	2519.	6.54	98.0	92.9
15 759	37.4	2453.	6.53	100.2	105.3
15 815	37.3	2425.	6.53	99.9	101.7
15 831	36.9	2461.	6.54	99.3	95.2
15 847	36.8	2498.	6.54	99.4	96.1
15 9 3	37.0	2532.	6.54	99.5	97.7
15 919	36.7	2553.	6.54	96.9	97.5
15 935	36.7	2575.	6.54	98.9	93.7
15 951	37.1	2530.	6.53	99.6	100.9
1510 7	37.1	2491.	6.53	99.7	99.6
151023	37.1	2513.	6.54	98.6	98.2
151039	37.1	2485.	6.54	97.4	101.6
151055	36.9	2464.	6.54	96.7	102.3
151111	39.0	2541.	6.78	101.3	90.7
151127	38.7	2730.	6.81	100.8	82.2
151143	38.7	2875.	6.81	99.9	79.4
151159	38.4	3097.	6.81	98.6	71.3
151215	38.4	3344.	6.88	100.8	65.9
151231	38.6	3553.	6.92	102.6	68.3
151247	38.5	3771.	6.92	102.0	69.3
1513 3	38.3	3950.	6.88	101.5	78.9
151319	37.8	3909.	6.71	100.9	95.2
151335	37.5	3961.	6.72	100.3	90.4
151351	37.9	3968.	6.70	100.9	93.6
1514 7	37.7	3980.	6.70	100.4	92.4
151423	37.8	3932.	6.70	97.2	97.5
151439	38.2	3911.	6.71	101.2	96.5
151455	38.1	3936.	6.71	100.6	93.8
151511	38.0	3971.	6.71	100.7	92.6
151527	38.0	3996.	6.71	100.6	92.9
151543	38.1	4002.	6.72	100.7	92.7
151559	38.2	3996.	6.72	101.0	93.8
151615	38.0	4025.	6.72	100.7	92.7
151631	38.1	3977.	6.66	101.0	101.2
151647	37.8	3948.	6.66	97.4	100.1

NATURAL ICING ENCOUNTER FLIGHT 2A
AIRCRAFT STATE PARAMETERS (JUNE 1ST 81A)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
1517 3	37.5	3952.	6.66	94.9	95.6
151719	37.8	3950.	6.66	100.3	96.4
151735	37.5	4005.	6.67	100.1	87.5
151751	37.6	4027.	6.67	100.0	93.4
1518 7	38.3	3943.	6.66	100.8	103.8
151823	36.7	3966.	6.56	98.4	95.1
151839	36.8	3996.	6.57	98.8	92.1
151855	36.8	4039.	6.57	99.0	91.6
151911	36.8	4048.	6.57	98.5	92.2
151927	37.1	4043.	6.57	99.6	96.1
151943	36.9	4037.	6.57	99.5	93.8
151959	37.0	4025.	6.57	99.8	95.6
152015	36.8	4021.	6.57	99.3	93.4
152031	36.7	4034.	6.57	99.4	93.0
152047	36.6	4043.	6.57	99.2	92.7
1521 3	36.6	4059.	6.56	99.3	92.6
152119	36.3	4059.	6.55	97.5	95.1
152135	36.2	4043.	6.55	94.7	96.0
152151	36.3	4041.	6.55	98.2	93.4
1522 7	36.5	4046.	6.55	99.3	92.6
152223	36.3	4050.	6.55	99.0	91.4
152239	36.4	4034.	6.55	98.4	95.9
152255	36.6	3977.	6.54	98.7	98.3
152311	36.1	4005.	6.55	98.0	91.7
152327	36.1	4002.	6.55	98.2	93.8
152343	36.3	3959.	6.55	99.2	96.8
152359	36.0	3939.	6.55	97.8	94.8
152415	36.2	3916.	6.55	97.9	96.0
152431	36.4	3980.	6.58	99.5	88.7
152447	36.5	4023.	6.60	99.0	89.6
1525 3	36.9	3998.	6.60	100.4	95.1
152519	35.3	4023.	6.60	88.3	89.3
152535	36.5	4078.	6.60	99.5	89.8
152551	39.6	4135.	7.01	104.4	85.9
1526 7	42.2	4291.	7.34	107.7	86.2
152623	42.6	4408.	7.33	107.4	92.1
152639	42.6	4515.	7.34	106.7	93.0
152655	42.5	4650.	7.34	107.0	93.1
152711	42.5	4772.	7.34	106.9	93.8
152727	42.4	4901.	7.34	106.4	90.7
152743	40.6	4991.	7.14	103.8	95.2
152759	36.8	4877.	6.48	98.9	103.9
152815	35.8	4835.	6.52	97.6	95.9
152831	36.5	4821.	6.61	98.7	93.0
152847	36.5	4779.	6.61	98.9	94.7
1529 3	36.4	4774.	6.61	98.7	92.6
152919	36.3	4743.	6.61	98.1	89.9
152935	36.3	4835.	6.61	97.9	87.9
152951	36.3	4861.	6.61	97.6	89.4
1530 7	36.2	4892.	6.61	97.7	87.3

NATURAL ICING ENCOUNTER FLIGHT 2B
AIRCRAFT STATE PARAMETERS (JUN-1H 318)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
153023	36.3	4889.	6.61	98.3	91.9
153039	37.3	4768.	6.61	99.6	98.9
153055	36.6	4783.	6.61	98.8	92.1
153111	36.6	4760.	6.61	98.7	93.1
153127	36.6	4753.	6.61	98.8	90.6
153143	36.8	4802.	6.61	98.9	86.7
153159	36.6	4821.	6.61	98.6	87.6
153215	36.8	4802.	6.61	99.1	90.3
153231	36.9	4795.	6.61	99.2	90.8
153247	36.8	4807.	6.61	99.0	88.8
1533 3	36.9	4783.	6.60	99.2	90.6
153319	36.8	4798.	6.60	99.0	88.7
153335	36.8	4826.	6.60	98.9	85.8
153351	36.8	4830.	6.60	99.0	89.6
1534 7	36.7	4826.	6.60	98.8	89.0
153423	36.9	4805.	6.60	99.2	92.4
153439	36.9	4783.	6.60	98.2	93.7
153455	36.9	4779.	6.60	98.6	91.1
153511	35.4	4809.	6.43	96.0	90.0
153527	31.1	4791.	5.82	89.8	89.4
153543	27.0	4725.	5.36	84.1	81.6
153559	26.6	4687.	5.36	83.4	75.4
153615	28.2	4697.	5.68	86.5	65.8
153631	31.7	4769.	6.14	90.7	66.7
153647	27.1	4837.	5.51	83.8	68.2
1537 3	22.5	4824.	4.82	77.0	66.3
153719	22.0	4753.	4.77	76.5	63.2
153735	22.1	4657.	4.76	76.8	63.4
153751	22.0	4562.	4.76	77.5	62.8
1538 7	22.7	4480.	4.91	78.5	64.5
153823	23.0	4443.	4.92	78.9	60.9
153839	24.0	4394.	5.09	80.6	59.0
153855	27.4	4392.	5.62	85.3	57.7
153911	28.6	4416.	5.76	87.7	61.3
153927	28.6	4464.	5.76	87.4	63.8
153943	27.3	4513.	5.61	85.6	63.7
153959	27.1	4557.	5.58	85.5	62.3
154015	27.1	4585.	5.57	85.3	62.2
154031	26.5	4610.	5.52	84.4	62.0
154047	25.2	4636.	5.35	82.5	61.2
1541 3	25.1	4643.	5.35	82.7	61.2
154119	25.1	4643.	5.35	82.6	62.0
154135	25.4	4622.	5.35	83.0	66.2
154151	25.3	4564.	5.36	83.0	71.2
1542 7	25.4	4536.	5.36	82.4	69.8
154223	25.4	4513.	5.36	82.2	68.5
154239	26.6	4492.	5.51	84.1	70.2
154255	26.6	4478.	5.51	84.1	71.0
154311	26.6	4457.	5.51	84.5	72.4
154327	28.7	4452.	5.81	88.0	72.5

NATURAL ICING ENCOUNTER FLIGHT 28
AIRCRAFT STATE PARAMETERS (JUN-1H 318)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
154343	30.0	4483.	5.98	89.9	74.9
154359	30.2	4492.	5.99	90.0	78.8
154415	30.4	4499.	5.99	90.2	80.8
154431	30.5	4485.	5.99	90.5	83.0
154447	30.4	4503.	5.99	90.0	79.6
1545 3	30.5	4508.	5.99	90.6	80.1
154519	30.8	4508.	5.99	91.1	80.7
154535	31.0	4513.	5.99	91.0	80.9
154551	31.2	4522.	5.99	91.4	81.5
1546 7	33.8	4517.	6.32	95.7	83.7
154623	35.5	4510.	6.50	98.4	89.6
154639	35.7	4492.	6.50	98.9	92.6
154655	36.2	4476.	6.51	99.3	90.8
154711	35.9	4510.	6.51	98.9	87.2
154727	36.1	4503.	6.51	99.2	92.0
154743	36.1	4497.	6.51	99.3	92.6
154759	36.1	4490.	6.51	99.1	91.7
154815	36.6	4490.	6.58	100.2	90.7
154831	41.2	4478.	7.12	106.7	94.4
154847	41.8	4483.	7.12	107.2	99.6
1549 3	42.1	4480.	7.12	107.9	102.5
154919	42.3	4478.	7.12	108.0	102.8
154935	42.4	4478.	7.12	108.0	103.1
154951	42.3	4478.	7.12	108.0	102.3
1550 7	43.4	4459.	7.12	109.5	103.5
155023	42.8	4418.	7.12	108.6	102.6
155039	41.7	4503.	7.12	106.9	92.0
155055	41.8	4583.	7.13	106.9	94.0
155111	41.4	4629.	7.12	106.2	95.5
155127	45.6	4578.	7.43	112.2	105.0
155143	45.2	4569.	7.43	110.7	103.1
155159	45.6	4599.	7.52	112.4	102.5
155215	47.4	4620.	7.65	114.2	106.1
155231	48.4	4608.	7.71	115.6	108.9
155247	48.2	4638.	7.72	115.9	107.6
1553 3	48.8	4634.	7.72	116.8	111.0
155319	48.9	4622.	7.71	116.9	111.3
155335	48.9	4606.	7.71	116.9	110.9
155351	48.7	4585.	7.67	116.6	110.8
1554 7	43.6	4601.	6.95	108.3	109.3
155423	37.4	4545.	6.45	100.2	100.3
155439	36.0	4527.	6.46	98.3	94.2
155455	36.7	4429.	6.46	99 .	101.9
155511	36.9	4360.	6.52	100	99.2
155527	38.5	4494.	6.87	10...	78.7
155543	37.5	4791.	6.88	100.0	64.2
155559	38.1	4995.	6.87	100.4	69.3
155615	37.1	5228.	6.87	98.7	62.4
155631	35.3	5211.	6.38	95.4	91.5
155647	29.8	4941.	5.47	88.0	107.2

NATURAL ICING ENCOUNTER FLIGHT 2A
AIRCRAFT STATE PARAMETERS (JUN-1H 316)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
1557 3	33.8	4713.	6.06	94.7	102.3
155719	34.6	4699.	6.35	95.9	8K.9
155735	35.2	4704.	6.38	96.4	8E.F
155751	35.2	4697.	6.39	96.0	89.1
1558 7	35.4	4669.	6.38	97.1	91.7
155823	35.4	4666.	6.41	97.4	89.2
155839	35.9	4638.	6.46	98.4	91.7
155855	36.0	4613.	6.46	98.5	93.3
155911	35.7	4615.	6.46	98.1	91.7
155927	35.9	4610.	6.46	98.3	92.F
155943	35.9	4589.	6.46	98.4	94.0
155959	36.2	4531.	6.45	99.0	97.1
16 015	36.2	4483.	6.46	99.1	97.F
16 031	35.8	4466.	6.46	98.5	92.6
16 047	35.5	4490.	6.46	98.0	89.7
16 1 3	35.7	4510.	6.46	98.2	88.5
16 119	35.4	4562.	6.46	97.7	84.6
16 135	35.4	4610.	6.46	97.3	85.3
16 151	35.4	4636.	6.46	96.5	87.8
16 2 7	35.6	4676.	6.46	97.5	86.4
16 223	35.9	4713.	6.46	97.3	88.0
16 239	37.2	4629.	6.45	100.1	99.2
16 255	36.9	4515.	6.45	99.3	100.8
16 311	36.8	4406.	6.45	100.4	102.5
16 327	36.7	4332.	6.45	100.3	101.4
16 343	35.7	4351.	6.46	98.4	90.6
16 359	35.2	4443.	6.46	97.7	83.6
16 415	35.3	4543.	6.46	96.7	81.5
16 431	35.7	4603.	6.46	97.1	82.8
16 447	35.3	4662.	6.46	97.1	79.6
16 5 3	34.8	4744.	6.46	97.2	79.7
16 519	35.5	4821.	6.46	96.9	81.3
16 535	35.2	4882.	6.46	96.8	82.1
16 551	35.3	4915.	6.46	97.1	84.1
16 6 7	35.8	4945.	6.46	97.9	94.F
16 623	36.2	4734.	6.45	98.0	100.F
16 639	36.6	4594.	6.46	99.8	105.5
16 655	36.8	4443.	6.46	100.2	107.4
16 711	36.6	4314.	6.46	100.2	106.0
16 727	35.1	4360.	6.46	97.9	87.8
16 743	34.3	4485.	6.46	96.4	80.F
16 759	34.2	4603.	6.46	96.3	7F.F
16 815	34.1	4734.	6.46	96.0	77.1
16 831	33.9	4849.	6.46	95.4	7F.1
16 847	33.9	4946.	6.46	95.2	77.3
16 9 3	34.5	4922.	6.46	96.5	82.9
16 919	37.2	4659.	6.47	100.5	113.0
16 935	37.3	4476.	6.47	100.2	111.3
16 951	36.9	4332.	6.46	100.6	106.7
1610 7	34.5	4455.	6.47	95.9	82.6

NATURAL ICING ENCOUNTER FLIGHT 2A
AIRCRAFT STATE PARAMETERS (JUN=1M 31A)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
161023	34.1	4571.	6.46	95.7	78.1
161039	34.0	4697.	6.47	94.7	75.7
161055	34.0	4828.	6.46	95.2	76.1
161111	34.6	4856.	6.47	96.6	81.3
161127	36.1	4583.	6.46	102.5	113.2
161143	37.6	4392.	6.47	101.7	111.4
161159	37.5	4231.	6.47	101.5	109.7
161215	37.1	4091.	6.46	101.1	106.7
161231	34.7	4201.	6.47	97.3	82.0
161247	34.3	4358.	6.47	96.5	72.2
1613 3	34.3	4497.	6.47	96.2	71.8
161319	34.2	4638.	6.47	95.9	72.6
161335	34.5	4748.	6.47	96.1	75.5
161351	35.3	4890.	6.46	96.4	82.4
1614 7	35.7	4813.	6.47	97.7	100.1
161423	36.2	4316.	6.46	101.8	110.2
161439	37.7	4158.	6.47	101.3	110.4
161455	37.0	4069.	6.46	100.7	100.4
161511	35.3	4321.	6.46	97.8	84.1
161527	33.7	4543.	6.47	96.7	62.9
161543	34.7	4748.	6.46	97.1	61.0
161559	35.9	4927.	6.46	97.5	62.2
161615	37.4	4885.	6.46	99.8	85.7
161631	37.7	4863.	6.46	100.3	90.6
161647	37.1	4854.	6.46	99.5	89.9
1617 3	36.6	4798.	6.41	98.9	95.0
161719	35.2	4821.	6.33	96.9	88.6
161735	35.0	4830.	6.33	96.9	89.0
161751	34.7	4875.	6.33	96.9	89.0
1618 7	34.3	4941.	6.35	95.6	83.3
161823	35.3	4943.	6.36	94.5	81.8
161839	35.7	4885.	6.35	97.3	98.0
161855	35.8	4798.	6.32	97.1	102.5
161911	33.3	4751.	6.23	98.4	96.8
161927	34.5	4730.	6.27	95.4	93.0
161943	36.1	4711.	6.46	96.7	91.0
161959	34.6	4753.	6.35	98.5	88.1
162015	34.8	4763.	6.35	96.4	90.5
162031	35.5	4710.	6.35	96.7	94.0
162047	34.3	4847.	6.25	98.0	92.2
1621 3	27.7	4725.	5.30	85.9	90.1
162119	22.0	4564.	4.40	77.6	91.6
162135	22.6	4282.	4.40	74.0	95.6
162151	22.4	4062.	4.41	74.1	90.7
1622 7	22.5	3810.	4.41	74.7	95.6
162223	22.1	3578.	4.41	74.5	88.9
162239	21.5	3391.	4.48	77.5	86.6
162255	22.3	3154.	5.12	77.4	92.6
162311	29.0	2957.	6.18	88.4	97.1
162327	34.1	2907.	6.95	95.9	98.5

NATURAL ICING ENCOUNTER FLIGHT 28
AIRCRAFT STATE PARAMETERS (JUN-1M 31A)

TIME (LST)	TORQUE (PSI)	ALTITUDE (FEET)	COLLECTIVE (INCHES)	FUEL FLOW (GAL/HOUR)	INDICATED AIR SPEED (KNOTS)
162343	35.0	2907.	6.95	96.7	100.6
162359	34.7	2914.	6.95	97.4	102.6
162415	35.0	2919.	6.95	94.8	99.8
162431	35.3	2920.	6.95	97.7	104.5
162447	35.2	2927.	6.95	97.9	101.7
1625 3	35.1	2940.	6.95	97.7	98.8
162519	35.1	2962.	6.95	97.2	99.5
162535	35.2	2981.	6.96	96.6	94.7
162551	35.0	2988.	6.95	96.3	100.3
1626 7	35.2	2984.	6.96	97.4	102.7
162623	35.3	2968.	6.96	97.7	103.0
162639	35.4	2927.	6.96	98.0	105.5
162655	35.3	2936.	6.96	97.8	104.6
162711	35.2	2962.	6.96	97.6	101.6
162727	35.2	3029.	6.96	97.2	96.9
162743	34.8	3121.	6.96	95.5	93.8
162759	35.0	3078.	6.96	96.0	105.7
162815	35.4	2986.	6.96	97.3	110.1
162831	35.2	2936.	6.96	95.9	106.2
162847	35.2	2947.	6.96	96.7	101.5
1629 3	35.1	3003.	6.96	97.1	96.7
162919	34.9	3054.	6.96	96.7	97.8
162935	35.3	3016.	6.96	97.5	106.3
162951	35.4	2957.	6.96	97.7	108.5
1630 7	35.4	2918.	6.96	97.8	107.7
163023	35.4	2896.	6.96	96.8	105.2
163039	35.4	2866.	6.96	97.1	106.7
163055	35.7	2704.	6.96	98.6	112.3
163111	35.5	2648.	6.95	98.4	112.5
163127	35.1	2662.	6.95	96.4	101.9